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ISBN 1-858704-22-7

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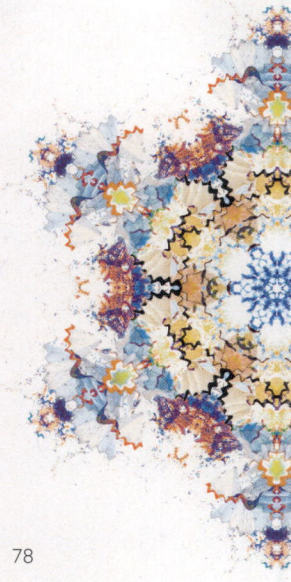

Welcome to the first in our new series of Pro Software Skills specials. Over the coming months we'll be bringing you 116-page guides on InDesign, Illustrator and After Effects – all aimed at improving your already fantastic design skills and improving your software workflow so you have more time to spend on more creative tasks.

But for now, let's concentrate on the issue you have in your hands. We don't need to tell you how fundamental Photoshop is to a designer's working life. And we're here to help you work even faster in the application – bringing a plethora of tips and new skills to make your job easier.

So whether you're a graphic designer, illustrator, retoucher or all three, this issue will prove invaluable in fine-tuning your workflow and creative processes. In our Pro Guides series, kicking off the issue on page 8, we look at how you can truly master some of Photoshop's core functions, including channels, curves and paths. Elsewhere we bring you 150 tips across retouching, illustration and web design, all with the view to expanding your knowledge and giving you new ideas.

Enjoy the issue, and please get in touch with us using the contact details below to let us know how you've managed to speed up your daily Photoshop work...

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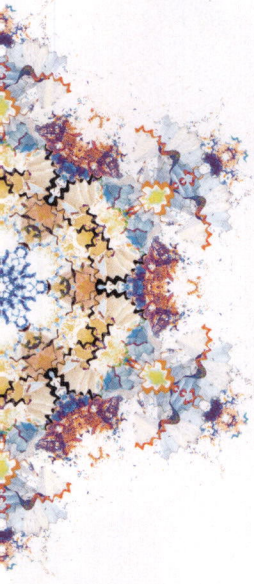

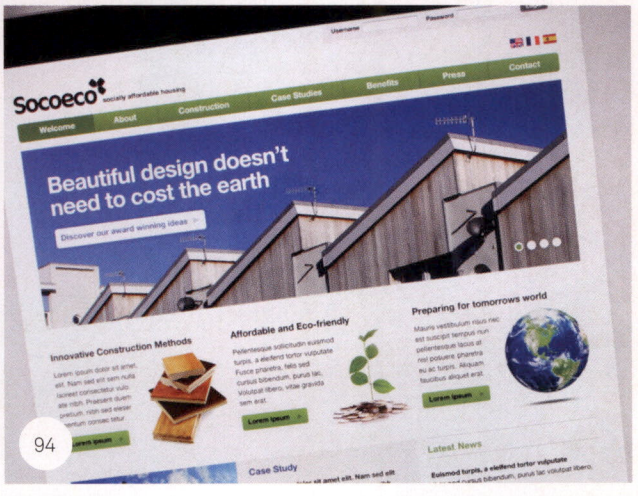

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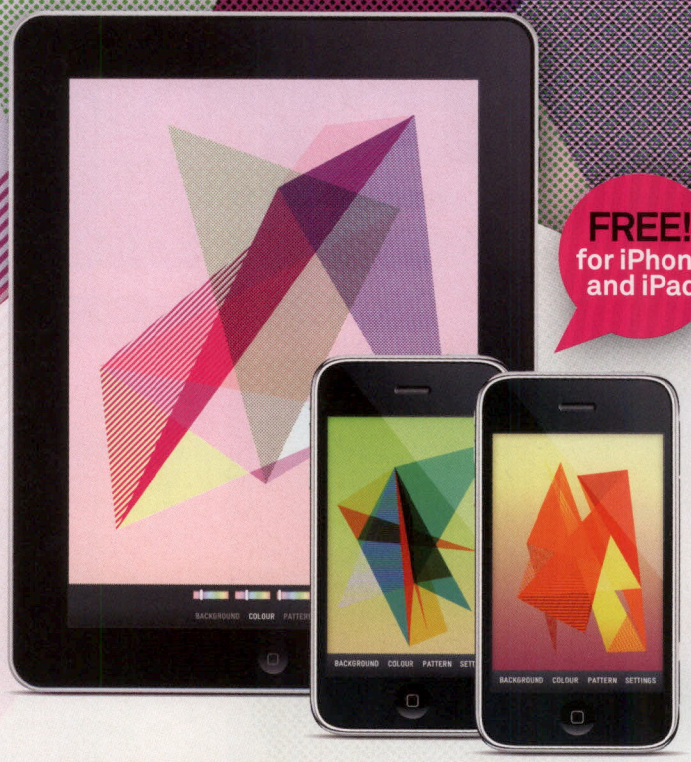

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CREDITS

Photoshop renegades, retouching masters and the founder of the world's most influential digital design collective. Meet the people behind *Pro software skills: Photoshop*

John Murray
The creative director of London-based digital agency Charm, which specialises in web design and build, digital advertising and infographics, is behind our design-for-web tutorial, page 94.

Falko Ohlmer
Opening each of the '50 tips' features in *Pro Software Skills: Photoshop* are stunning illustrations from this Hamburg-based creative. The first piece accompanies the retouching tips, page 52.

Sam Hampton-Smith
Scottish designer Sam works across branding; design for print, web and motion; and design training. He shares his advice on designing for the web in the 'Design for web top 50', over on page 88.

Ice Cream For Free
Oliver Weigner is the man behind Berlin-based studio Ice Cream For Free, which lends its illustrative talents to *Pro Software Skills: Photoshop*'s 'Pro guide' pieces, the first of which begins on page 8.

Justin Maller
We profile the Australian designer and founder of depthCORE, who takes Photoshop back to basics for clients including Verizon and DC Shoe Co. Read about his creative approach on page 38.

Tim Vin
One half of Beefactory, the retouching wizards working out of Brussels, Tim studied graphic arts at Instituts Saint-Luc Bruxelles, and retouches work across architecture, automotive and beyond.

Frédéric Labeye
Joining Tim Vin at Beefactory is Fred, who hails from a photography background. We profile the pair and their awesome Photoshop work on page 62.

Ben Secret
Designer and cinematographer Ben is a fount of Photoshop knowledge, as his stunning design and retouching work attests. See his artwork on the disc, and follow his tutorial, page 58.

Emeric Trahand
Profiled over on page 82 is New York-based French designer Emeric, who works under the moniker Takeshi and counts the likes of EMI and Adidas as clients for his Photoshop masterpieces.

Mike Kus
Ploughing his own furrow in Photoshop design for the web is UK-based Mike, who we speak to about the importance of beautiful graphic design for online, and the future of website aesthetics.

Per Gustafsson
Swedish designer Per is the go-to man for spectacular abstract Photoshop creations, marrying traditional media with digital techniques. He shows us how he does it on page 74.

Andrea Stark
Recently graduated from Massey University, this New Zealand designer is adept at transforming everyday objects into incredible artworks using Photoshop. Check out her tutorial on page 78.

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Subscriptions
0844 848 2852
www.myfavouritemagazines.co.uk
Next issue – *Pro software skills: InDesign* – on sale 26 July 2011

Distributed by
Seymour Distribution Ltd, 2 East Poultry Avenue, London EC1A 9PT Tel: 0207 429 4000

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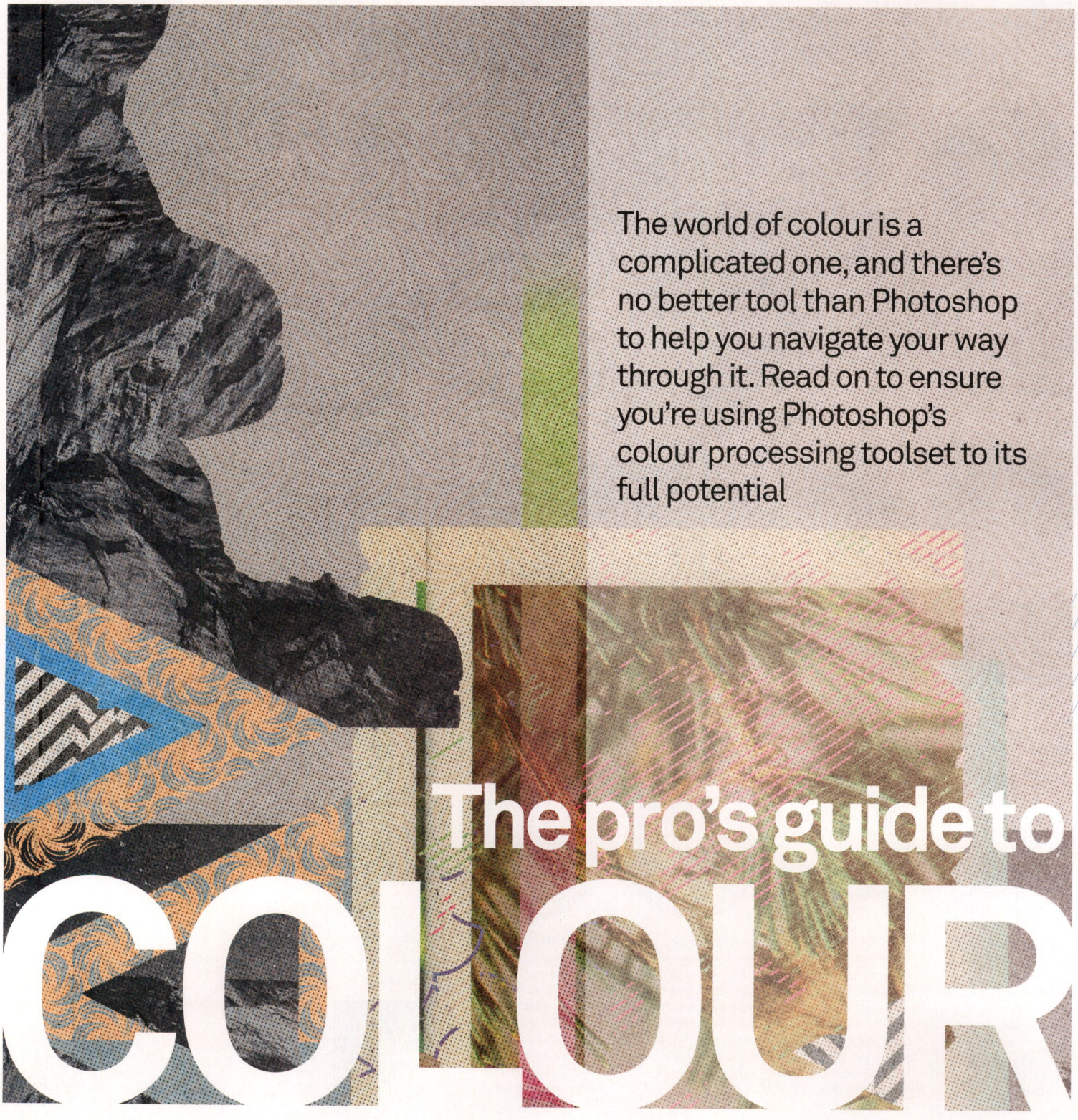
THE PRO'S GUIDE

However you use Photoshop in your design, here's how to make the app work harder for you

THE PRO'S GUIDE TO COLOUR
This page: Ensure that your work benefits from the best use of Photoshop's incredible offering of colour tools

THE PRO'S GUIDE TO CHANNELS
Page 14: They're the building blocks of most multi-layered compositions. But are you using them to your full advantage?



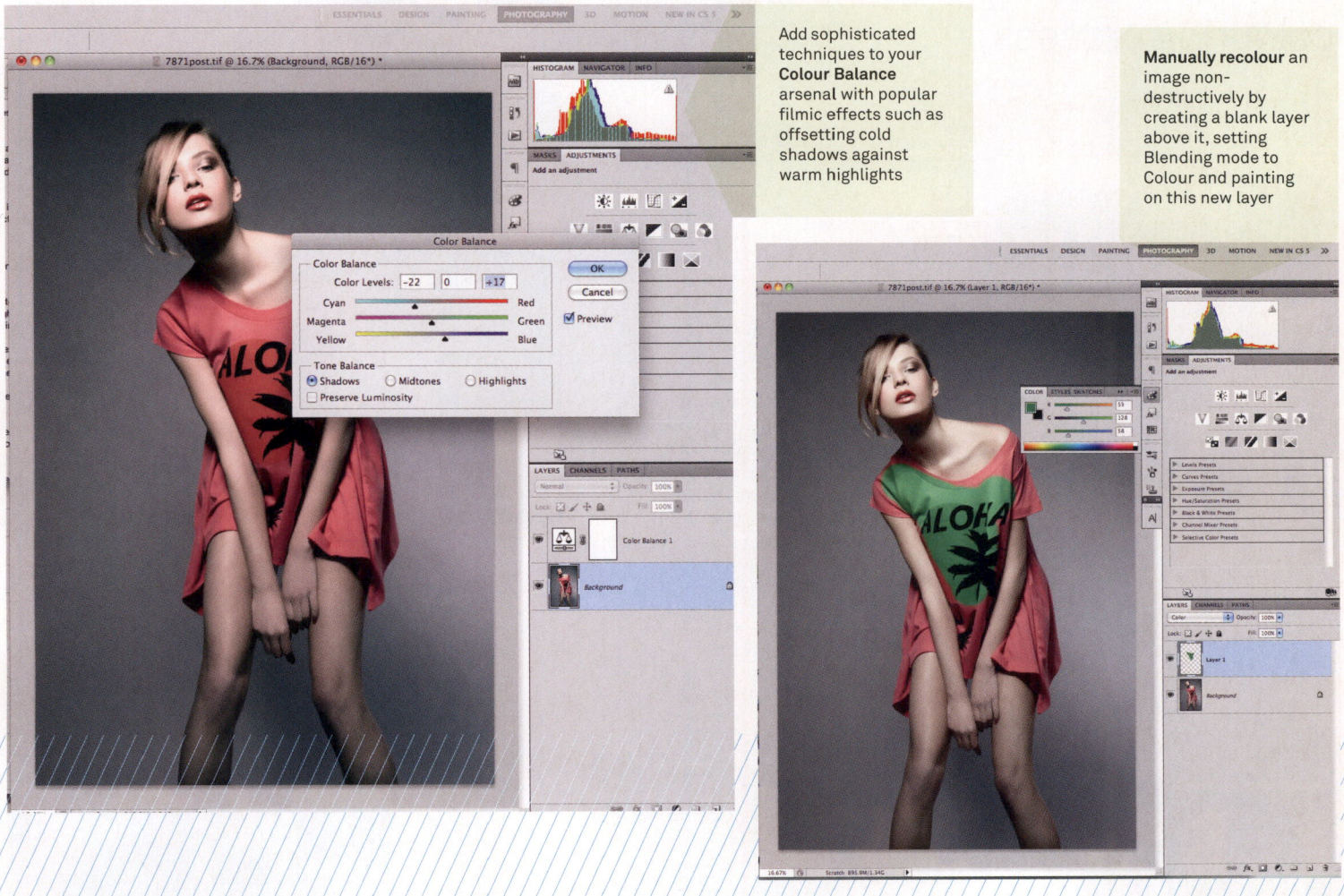
The world of colour is a complicated one, and there's no better tool than Photoshop to help you navigate your way through it. Read on to ensure you're using Photoshop's colour processing toolset to its full potential

The pro's guide to COLOUR

THE PRO'S GUIDE TO CURVES
Page 20: How to make sure you squeeze every last drop of functionality out of this versatile Photoshop tool

THE PRO'S GUIDE TO PATHS
Page 26: It's the method of choice for selecting and isolating individual areas. But what else can be done with paths?

THE PRO'S GUIDE TO LAYERS
Page 32: We all use them – but could we use them better? Here's how to be more efficient and creative with your layers



Photoshop provides a wide range of colour tools which enable you to perform anything from simple colour adjustments to applying very specific processes to selected areas or ranges of colours in an image.

One of the most straightforward colour tools in Photoshop is Colour Balance. This helps you broadly control the balance of red, green and blue in an image across the highlights, mid-tones and shadows. It also demonstrates a simple rule when working in RGB colour, and that is that subtracting reds takes you towards cyan, subtracting greens towards magenta, and subtracting blues towards yellow.

A simple application of Colour Balance would be to correct an image which has, for example, a green colour cast in the shadows. By selecting shadows and taking the green slider towards magenta, we should find a point which corrects this colour cast without shifting the colours too much in the mid-tones and highlights.

For a more stylistic use of Colour Balance, we can perform classic colour-treatment effects commonly used in advertising and cinematography, such as offsetting cold shadows against warm highlights, or vice versa. So, for example, we can add red in the Highlights region, and subtract red – consequently adding cyan – in the shadows.

For more flexibility, we can exchange the Colour Balance tool for Curves. Curves enables us to adjust the tone curves of each colour channel independently (so you can selectively add or subtract red, green and blue from highlights, mid-tones and shadows) and additionally enables you to control the exact shape and position of these adjustments with moveable control points.

When combined with Layer Masks, Photoshop's colour tools can become highly customisable painting tools. So if we need to correct a slightly dark yellow region in an image, we can use a Curves Adjustment Layer to create an effect that adds blue to the mid-tones, thereby reducing yellows whilst also raising the mid-tone brightness. Applying a Hide All mask to this layer, we can now paint this effect in only where it's needed using a white brush, with a fairly low flow and/or opacity, applied directly onto the Layer Mask.

Selective colouring with Colour Range

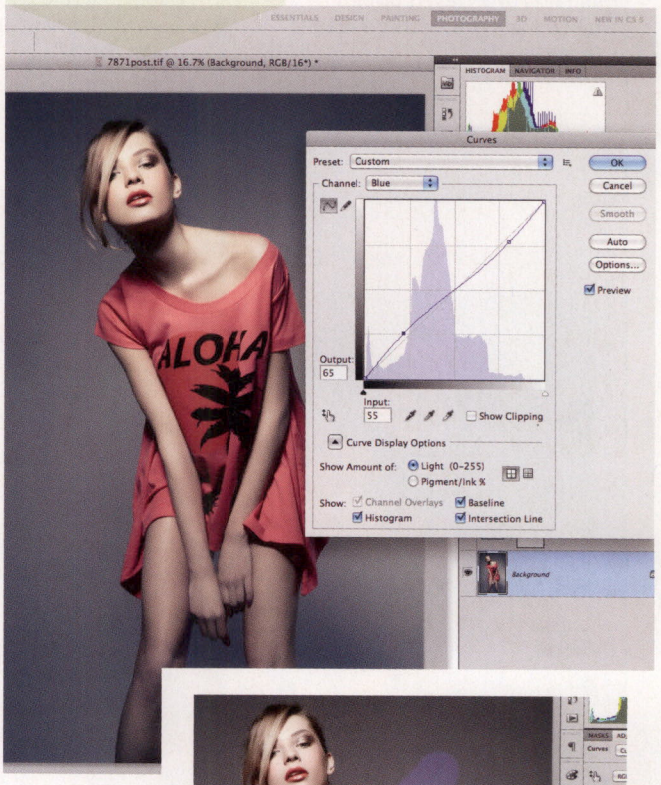
Master the use of this tool to maintain flexibility in your image colouring process

01___ One of the most flexible ways to selectively process colour in an image is to use the Colour Range tool in the Select menu. If we want to change the colour of the phone box in this image to purple, we can first use the Eyedropper tool – with Sample Size set to 5x5 average – to select the phone box as our foreground colour.

02___ Go to Colour Range, and with Sampled Colours selected, adjust the Fuzziness slider until the preview selection shows only the phone box (or as close to that as you can get). If we OK this layer we now find that this colour region has turned into a selection. If we add a Hue/Saturation layer, it will be automatically masked to only apply the effect to this region.

03___ Now we can adjust the Hue slider to create our purple phone box. Any other areas of the image which are being affected can be cleaned up by editing this layer's mask, which can be edited in full by selecting it with Alt/Opt+Click. We can also use this mask and a Hue/Saturation layer to perform classic selective colour effects, like setting colour against black and white.

Exchanging the Colour Balance tool for **Curves** enables you to adjust tone curves of each channel independently



→ The Colour Blending mode also makes manually recolouring an image very straightforward. We can simply create a new blank layer above our image, set its Blending mode to Colour, and then paint and fill on this layer to change the colour of the image underneath without affecting its luminosity or texture. Brushes themselves also have a Colour Blending mode, although applying our colouring to a separate layer is non-destructive and usually offers more flexibility.

The Blending modes open up a lot of interesting ways to stylistically change the colours in an image, too. For example, if we create a Solid Colour layer of deep blue and change its Blending mode to Exclusion, we get an interesting effect where the shadows in an image are shifted towards blue and the highlights are shifted towards yellow. As always, this effect can be toned down with the layer's Opacity slider. If we then change the Blending mode to Screen, we should get a hazy blue effect lifting the shadows. Changing the Blending mode to Colour acts like a colour filter on a camera, and, mixed in at 100%, gives us a toned monochromatic image.

5 top colour tips

1/ Colour Maps

You can isolate and analyse the colour information an image uses by creating a Colour Map. This will display the colours an image uses on their own without any luminance data. To create a Colour Map, add a Solid Colour layer and set its RGB values to 128, 128, 128, for 50% grey. Now add your image layer on top and set its mode to Colour.

2/ Saturation Maps

A saturation map turns our image into a greyscale, where white represents full colour and black no colour. This can also be used to analyse an image, or it can be turned into a mask. Create a Selective Colour layer and set the Black slider in Reds, Greens, Blues, Cyans, Magentas and Yellows to -100, and to +100 in Whites, Neutrals and Blacks.

3/ Curves Layers

Viewing an image as a saturation map is an interesting way to see how we can affect colour saturation using a Curves layer. Between our image and the Selective Colour layer, add a Curves layer and set its Blending mode to Colour. Notice how making the line horizontal at various points along our curve selectively darkens and desaturates the image.

4/ Vibrance

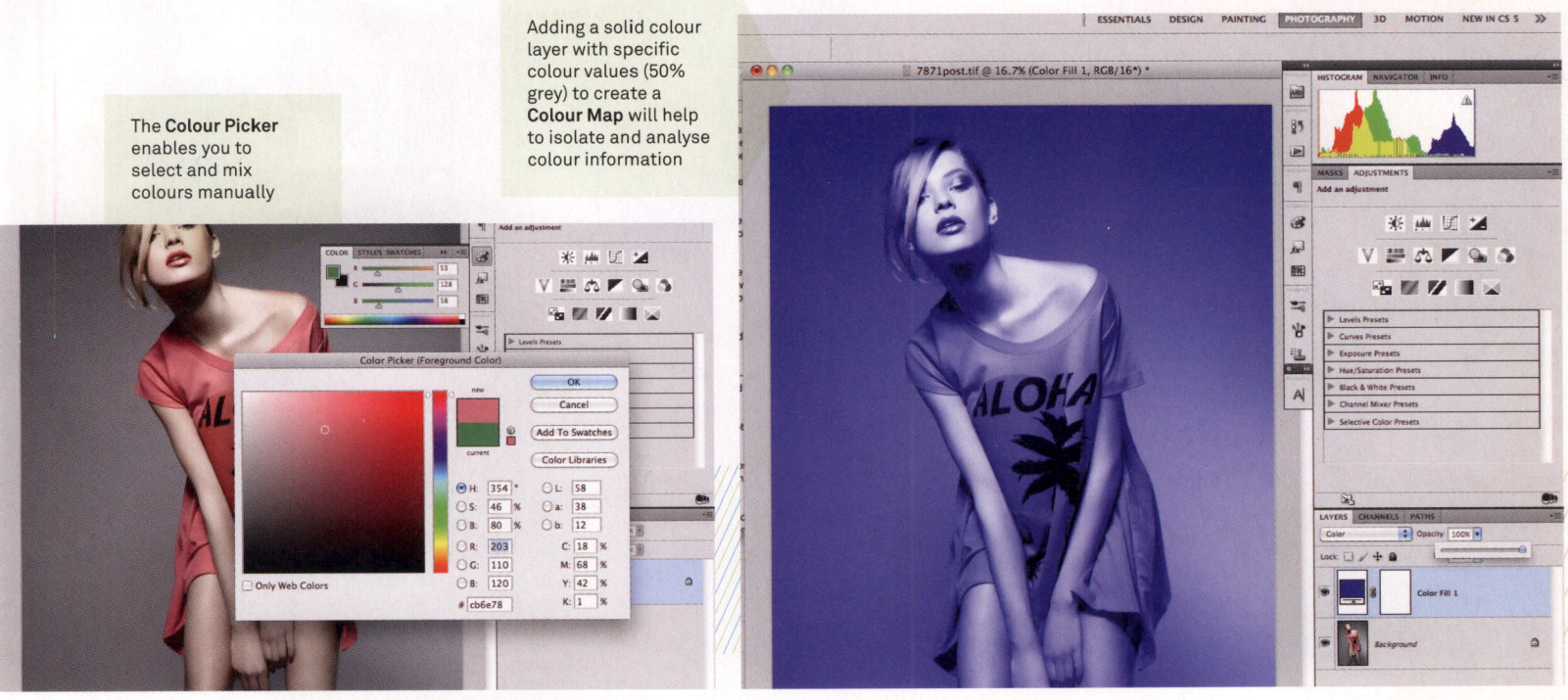
Vibrance is an alternative way to control image saturation. Unlike the linear Saturation slider in the Hue/Saturation tool, Vibrance avoids over-saturating, and hence clipping, colours by applying progressively more saturation to less saturated pixels. It also has an alternative saturation slider, which applies saturation somewhat exponentially.

5/ Blending modes

Blending modes themselves can be used and combined to create interesting colour effects. Add a Curves layer and set its Blending mode to Colour. Now add another Curves layer and attach it to the first one as a clipping mask. Set its Blending mode to Linear Burn. We can add another in this way and set its Blending mode to Colour Burn.

The **Colour Picker** enables you to select and mix colours manually

Adding a solid colour layer with specific colour values (50% grey) to create a **Colour Map** will help to isolate and analyse colour information



Central to working with colour in Photoshop is the Colour Picker, which enables us to select and mix colours manually, so we can simultaneously view and edit the colour represented by: HSB (Hue, Saturation, Brightness); Lab colour; RGB, CMYK and HEX. It also enables us to select, amongst others, standard Pantone colours for use in print.

One thing you might soon notice if you're familiar with colour theory is that the colours Photoshop will give you when applying, for example, complementary colour rules using the Colour Picker or Hue/Saturation tool, will be slightly incorrect. Using a standard colour wheel, we can find any colour's complementary colour by looking at the colour which is opposite to it (or 180 degrees around the wheel). This will give a cool colour its warm counterpart, for example balancing teal with orange, or balancing blue with yellow.

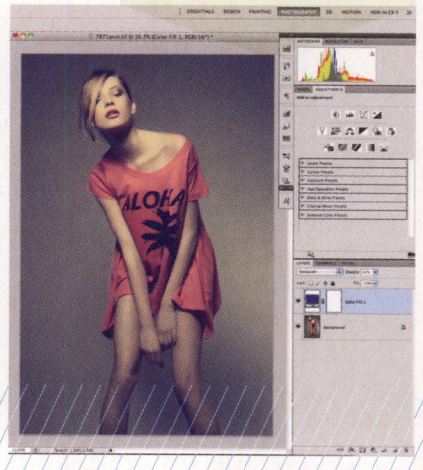
We might expect that shifting a colour's Hue 180 degrees in Photoshop would achieve the same thing. However, colours inside a computer are calculated using the 'light model' (red, green and blue), while the original colour wheel was formulated from primary paint pigments (red, yellow and blue), and is arranged slightly differently.

Adobe offers a brilliant free online colour wheel in the form of Kuler (http://kuler.adobe.com/) which features a recreation of a standard colour wheel along with a variety of colour theory models we can apply directly to it. Below this the colours' corresponding values are displayed for use in Photoshop.

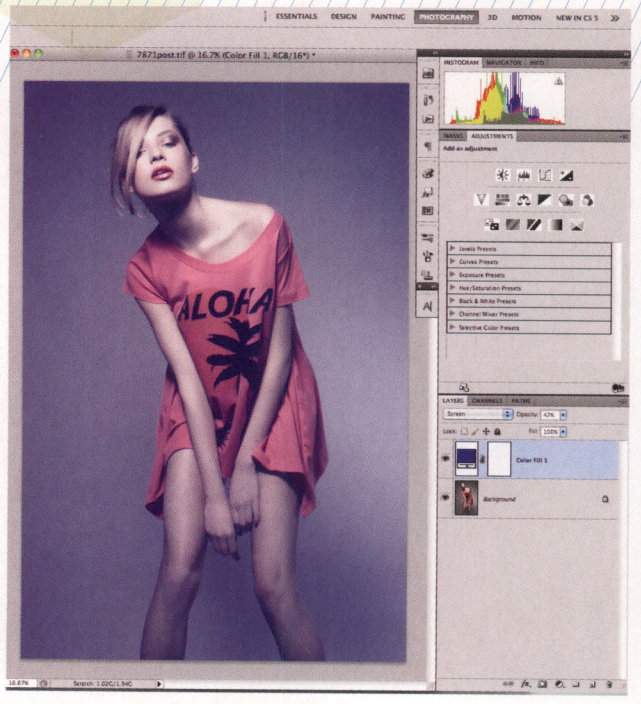
Colour profiles are another important consideration when doing any kind of work in Photoshop. A colour profile is essentially the area of the colour range Photoshop works with, and how these colours are mapped across the colour values you use. Prophoto RGB is a very wide colour gamut – far wider than monitors can display, and even wider than human colour perception – but for that reason it's a very future-proof profile and should accurately represent the full range of colours that a digital camera's sensor is capable of capturing without any colour clipping.

At the other end, sRGB is a fairly narrow range of colours, easily reproduced by most monitors, and is the →

On a Solid Colour layer of deep blue, change the **Blending mode to Exclusion** for interesting blue-tinged shadows with yellowish highlights...



... and if you then change the **Blending mode to Screen**, a hazy blue effect will lift the shadows



→ standard colour profile for web images. It's very important, then, that images destined for the web are converted to and saved with an sRGB colour profile. Images saved with different profiles will be represented by many web browsers incorrectly and will typically look dull and washed out.

Many photographers and designers spend much of their time working in the Adobe RGB colour profile. This is the colour profile that higher-end monitors for design and photographic work are generally designed to display. It can reproduce most of the colours that a camera's sensor records, and gives you a wider range of colours for printing than sRGB.

Precise spot colour matching

Using the Colour Sampler tool will help you correct and match colours with ease and efficiency

01 ___ For a precise way to correct colours, we can use the Colour Sampler tool. Selecting a sample size of 5x5 average, if we place a Colour Sampler on a correctly coloured area of an image we want to match something else to, the Info window should display the balance of red, green and blue we need to work towards.

02 ___ Placing another Colour Sampler on our incorrectly coloured region, we can get an idea of by how much and where the colour balance is off. We can then draw a selection around this region, with a feather of about 10 pixels, and add a Curves layer – this will now be automatically masked so it only affects the region we want it to.

03 ___ One option could be to use the Colour Sampler information and the Colour Curves to match the red, green and blue values exactly. This might not look right, because it might have shifted the brightness of this region along with the colour. In which case we can simply change the Blending mode of the Curves layer to Colour.

Need to hone your skills?

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To get the most from Photoshop, it's important to understand what channels can do for you, and the various roles they can play in your work

The pro's guide to CHANNELS

01 The Black and Cyan channels are placed on new layers and **blended to bring richness** to an image

02 To create a darker mood, further alter and experiment with the **various blending modes**

5 top channels tips

1/ Saving channels and masks from selections

You can create a Layer Mask from an Alpha Channel and vice versa – it's a lossless transition. A great time-saver is to create a keyboard action that opens the Save Selection dialog box. While you could action it to create the Alpha Channel directly, you'd have to rename it in the Channels palette, and the former method avoids that.

2/ Top shortcuts

There are a few keyboard shortcuts in Photoshop that are integral to working with channels and Layer Masks. Fill with Foreground Colour (Alt/Opt+Backspace) and Fill with Background Colour (Ctrl/Cmd+Backspace) are both useful. Similarly, when colours are set to default black and white, use D to set and X to switch – this is essential for removing or adding areas of a mask from a selection, or another Alpha Channel or mask.

3/ Gradients

Using gradients on your Alpha Channels or Layer Masks can bring some much-needed subtlety and smooth transitions, often giving a better result than painting on a mask would. Try using a gradient with the Foreground-to-Transparent option and your colours set to Default; this will enable you to graduate white or black to achieve the effects.

4/ Refine Mask

Use the Refine Mask option in the Masks panel in exactly the same way as you would with Refine Edge, the difference being that this is done directly to your mask, with on-screen updates. It's very useful and is a good time saver.

5/ Heavy metals

If using a metallic spot colour within an image that uses channels (as in the 'Boost colour in a printed image with spot colours' walkthrough, page 18) double the weight you initially think is enough, as metallic colours need to be heavier when overprinting to obtain the required impact. Source a hand-toned digital proof of your PDF, with three or four mini versions at differing opacities, to save time and money.

We all know what a channel is, right? Well, there are a lot of misconceptions that a channel is just one of the colour separations that you'll find in every image you work on in Photoshop. Channels, in their basic state, form the pixel data required to display an image structure and colour by displaying black and white pixels with the grey values in between. But if you look beyond this and start creating new channels, you'll find that they are the building block of most of your multi-layer creative compositions.

Many of us know how to alter colour by manipulating the colour channels using Photoshop's many colour adjustment features, such as Curves or Levels. But this is just the tip of the iceberg where channels are concerned. The first area to look at is using channels as a masking tool, by creating a storable, editable means of selecting part of an image. This could be generated from one of the existing colour channels present in your image, or by creating a new mask from your paths or selections to create something special using one of the many filters and effects available. Why? Because a channel can be manipulated just like an image.

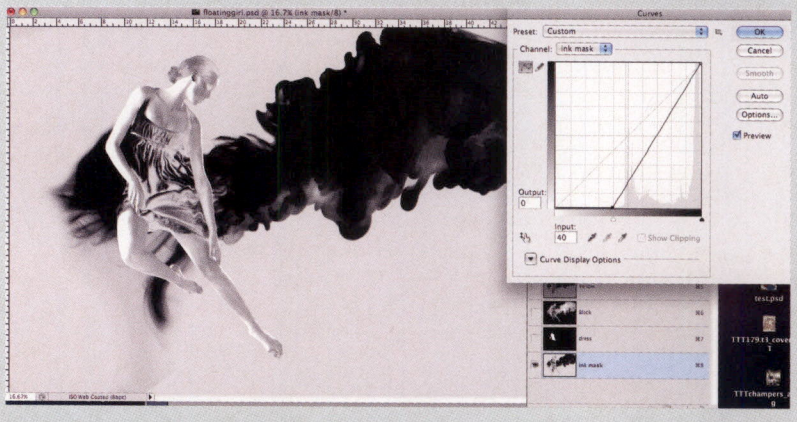
Channels and Layer Masks are the most valuable elements of non-destructive image editing; if used correctly, they leave the source image intact and permanently re-usable or editable. If you need to montage several assets into a professional artwork, a Layer Mask and an Alpha Channel perform similarly but are used for different purposes. Both are editable in the same way – with black hiding your adjustments or effects and white revealing them – but an Alpha Channel is a method of saving selections in a location that doesn't complicate or compromise your layer stacks. An Alpha Channel can hold all your modifications, such as feathers, so you can always return to it as a kind of 'master mask'. A Layer Mask, however, is for layer-specific alterations.

When working on a colour-critical commission, it's best to have many alpha channels stored as a selection archive covering all the relevant areas of that artwork/image. You can then return to your alphas (selections) at any time and be confident that they are true to the chosen area. Then create a Layer Mask on your Adjustment Layers, applying adjustments non-destructively – perfect should you need to revisit for alterations in the future. →

Photography (apart from images 04 and 05): Richard Grassie

Altering colours using channels, masks and gradients

Utilise channels to build unique and creative colour effects into any image



01 First open floatinggirl.jpg from your disc in DiscContents\Resources\Channels. Create two Alpha Channels from the dress and skin paths. We want to affect the inky liquid and the dress, so duplicate the Yellow channel, then using Curves (Image>Adjustment>Curves), drag the start point to 40. Go to Image>Apply Image, change Blending to Overlay and make the Opacity value 100. Dodge the highlights to clean the edge. Remove or fill other areas with a brush.

02 Now to limit your mask to the desired area. Select the skin path, click on your ink mask and fill the selection with black (D+Ctrl/Cmd+Backspace). Now include the dress in the ink mask: Cmd/Ctrl+click dress mask to load, then hit D+Alt/Opt+Backspace to fill with white.

03 Now to channel mix colours. Click on the CMYK thumbnail, then Ctrl/Cmd+click on the ink mask. Go to the Layers palette, and create a Channel Mixer Adjustment Layer. As your channel mask was active, Photoshop has created a Layer Mask automatically. Next, reduce Cyan in Cyan output to 5%, and add 100% Cyan into the Magenta output. Add a right-to-left Transparent-to-Foreground gradient onto the Layer Mask to create the traffic-light effect shown above.

03 Add a mask to a Brightness/Contrast Adjustment Layer, and set it to Multiply to **boost highlight detail**

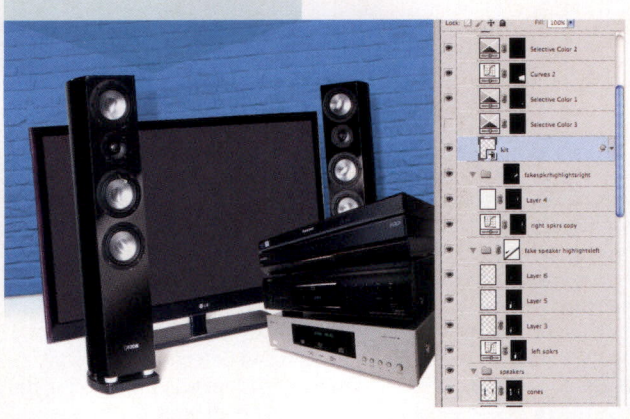
04 A Layer Mask is for **layer-specific alterations**. Here we have the master alpha...

→ You can fine-tune each adjustment on the Layer Mask, with the original selection of that area remaining static as it's stored in the Channels palette (see the 'Altering colours using channels, masks and gradients' walkthrough). If you're confident that you won't need to alter your selections, you can affect the image directly using an Alpha Channel selection.

If you need to create a very complex mask, it's worth learning to use the Colour channels that already exist in an image. This is often referred to as a 'found mask'. There are lots of professional uses for this – we could use it for a tricky hair selection or to retouch an image – if you use it as a Luminance mask. That involves choosing one of the existing channels and using the natural Luminance values to create an Alpha Channel or, alternatively, adding it as a mask to an Adjustment Layer such as Brightness/Contrast, set to Multiply to boost the detail in the highlights. This is editable both by altering the blending mode and by manipulating the Luminance of the mask, possibly using Levels, which also gives you on-screen updates.

If you are using a 'found' or Luminance mask from a channel, the Apply Image command can be very useful in turning

05 ...while this image shows the **many Layer Masks created** from the alphas, each with their own effects added

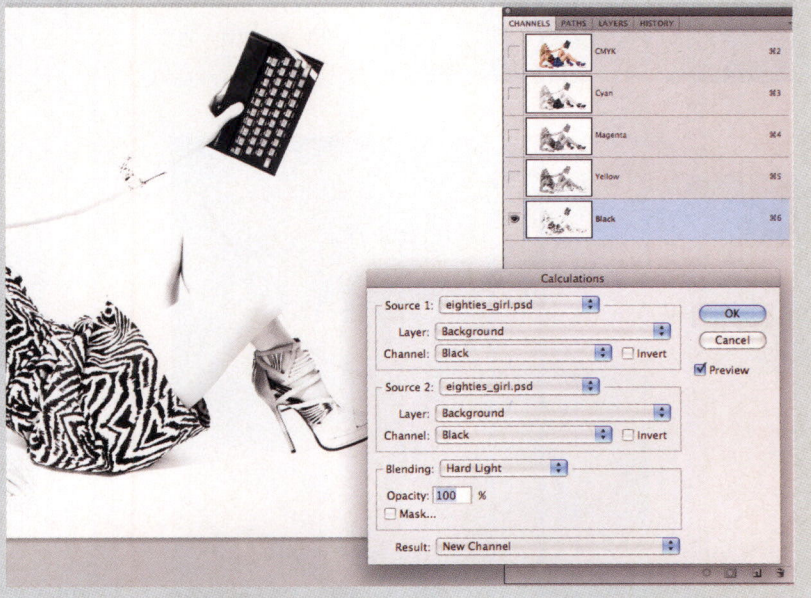


a channel into a good mask. Another much under-rated feature of Photoshop is the Calculations command. It looks really complex, but don't be put off – it enables you to visually mix two channels from all the channels at your disposal (even from different source images) and you can adjust the various blending modes at the full range of opacities. Once you're happy with your effect, you can specify it being saved out as either a Selection, a Channel or a New Document. Experiment with this – it's a powerful tool and can take some getting used to. See the 'Create a channel with Calculations' walkthrough for a simple example of Calculations' versatility.

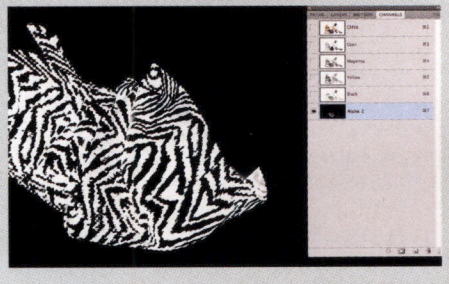
Remember that channels and Layer Masks are essentially images, so edit them accordingly. Try Curves, use Motion Blur to add controllable movement, sharpen filters, use the Filter gallery (which is well worth a go), use Dodge and Burn commands, and add gradients, not to mention the possibilities with the blending modes in Layers. In image 01 (page 15), we've used the Black and Cyan channels on new layers, blending them to give a richness in two quick steps. Conversely, to create a darker mood, you can further alter the blending modes (see image 02,

Create a channel with Calculations

The Calculations command opens up a whole new world of interesting effects when used alongside channels

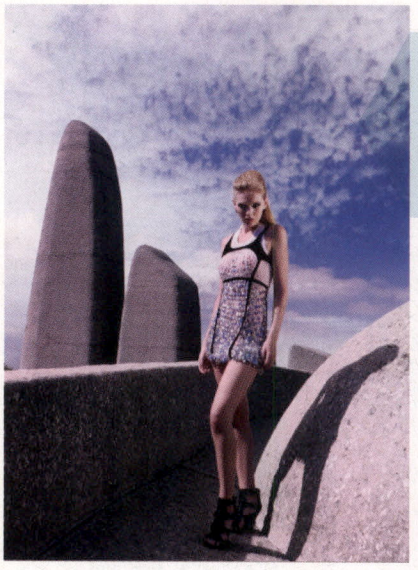


01____ Open the image eighties_girl.psd from DiscContents\Resources\Channels. Go to the Channels palette, and click on the Black channel, where you'll find a mask. Go to Image>Calculations, set Layer to Background and Channel to Black in both sources. Set Blending to Hard Light and see the effect of it contrasting the mask. Select New Channel in drop-down menu, click OK then repeat this action but with your new channel.



02____ Now to select areas for the mask. Delete the first Alpha Channel, and click on the second Alpha Channel. Using the Tidy Mask path, make a selection, invert it and fill the area outside the dress with white. Select your new channel, and invert it to a negative mask (as in the screen grab above). Ctrl/Cmd+click it to load the selection. Click on the CMYK channel thumbnail to turn off the Alpha Channel (the selection remains) and activate the colour channels.

03____ Next we'll add a Channel Mask to a new image. Go to your Layers palette, activate Layer 2, and click the Add Layer Mask button. Set the blending mode of Layer 2 to Colour Dodge – hopefully this will encourage you to explore the plethora of effects available using the Calculations command.



06 Before the Red channel from a different image is brought into play to manipulate the sky's colour...

07 ...and **after**, with the new channel adding drama to the image's colour

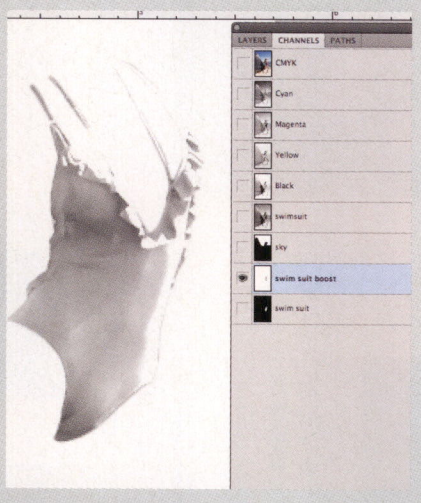
→ page 15). In images 06 and 07 (page 18) you'll see a red channel from one image used to manipulate a sky on a different image.

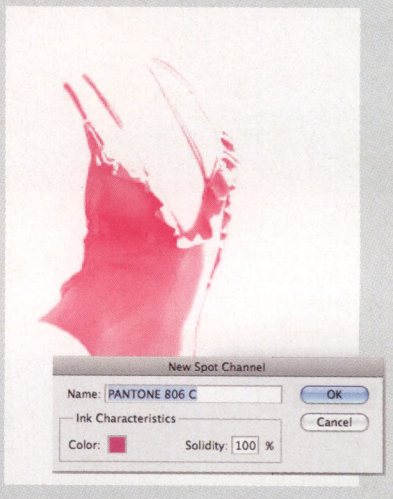
If you're working with vector artworks, a simple channel of your shape can take you along a creative path to your finished artwork. On images that begin with a line drawing, the Alpha Channel can be created as base selection for you to refer to.

There will be occasions when the normal four-colour printing process doesn't give you the required amount of impact. At times like these, the Channels palette can be used to give your imagery a much-needed boost. Add a Spot Colour channel to your file by including some of the image data, or add an area in a specified Pantone colour for your printer to use as an extra plate. Once you've identified the area that you want to work on, decide whether to use a found mask from an existing channel or to use a selection, possibly from a stored Alpha Channel or path of the area required.

Boost colour in a printed image with spot colours

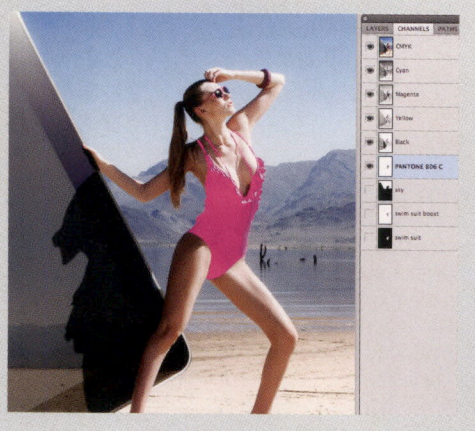
Add flexibility to your artwork by incorporating spot colours via your channels





01 Firstly to choose the colour channel. Open spot colours.psd from DiscContents\Resources\Channels. We want to boost the swimsuit colour to a fluoro pink, so the idea is to choose a colour channel that has an amount of detail – but not too much or it will block out the rest of the contours of the CMYK separations. Choose the Yellow channel, duplicate it and name it 'swimsuit boost'. Invert the swimsuit channel (Ctrl/Cmd+I), load that selection, click on the 'swimsuit boost' channel and fill with white to clear the unwanted areas.

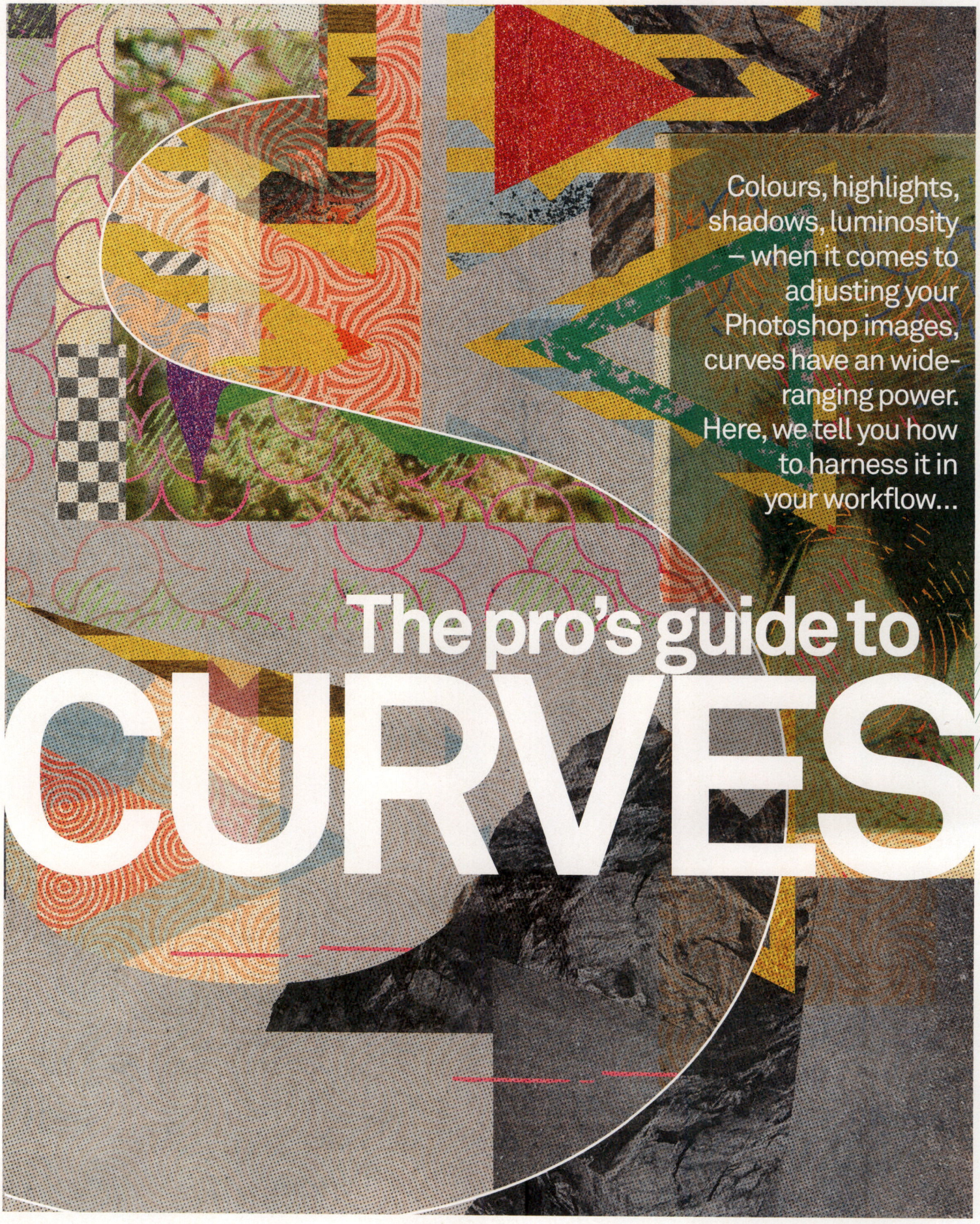
02 Now to create a spot colour from a channel. Click on 'swimsuit boost', go to Image> Apply Image, and change the blending mode to Multiply to boost the tones. Click on it, go to Select>Load Selection, and check Invert. Ctrl/Cmd+click on the Create New Channel to bring up the New Spot Channel dialog and choose Pantone 806 C from the Colour tab. Turn the visibility on for the CMYK separations.



03 Finally we check and refine. The channel is named 'Pantone 806 C' – the pink is Photoshop's interpretation of that colour. If you feel there's too much/not enough pink added, try using Curves on this channel to edit it. This new plate will preview in InDesign and show on your PDF as an extra separation. If you wish to test the results before committing to print, order a hand-toned digital proof.

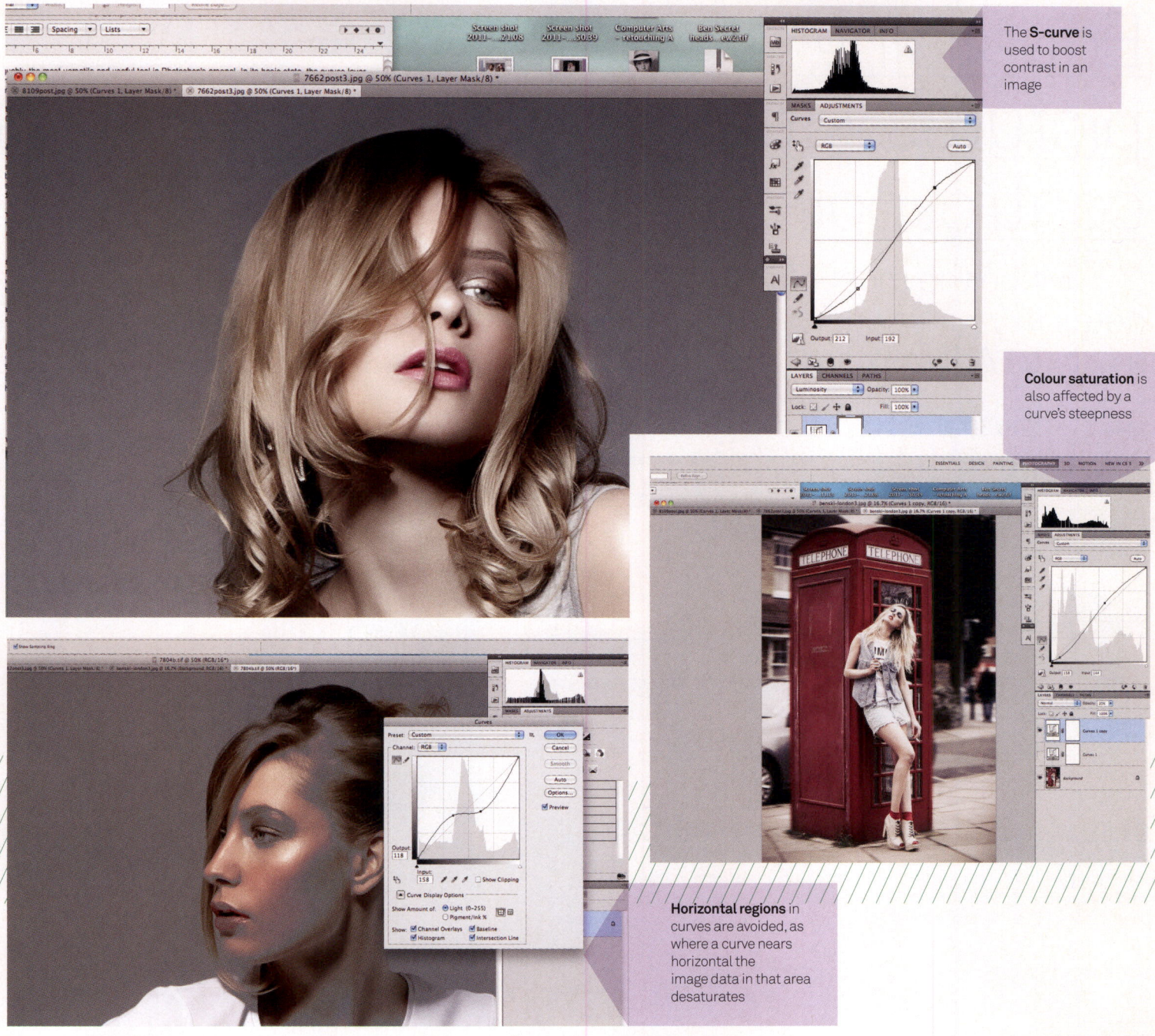
Or get inspired for that next big project?

computer arts



Colours, highlights, shadows, luminosity – when it comes to adjusting your Photoshop images, curves have an wide-ranging power. Here, we tell you how to harness it in your workflow...

The pro's guide to CURVES


The **S-curve** is used to boost contrast in an image
Colour saturation is also affected by a curve's steepness
Horizontal regions in curves are avoided, as where a curve nears horizontal the image data in that area desaturates

Curves is perhaps the most versatile tool in Photoshop's arsenal. The Curves interface presents you with a graph with an input and an output axis – the horizontal input axis representing the *before* value of the pixels in your image, with the vertical output axis representing the *after*. Both axes are split into four regions – shadows, mid-tone shadows, mid-tone highlights and highlights – covering a numerical range from 0 to 255. Constructing a curve between these axes enables you to flexibly remap the distribution of tones in an image.

Almost any photographic image will require some kind of tone curve, as the real world we attempt to capture typically covers a very wide dynamic range from light to dark, while a printed image has a relatively narrow dynamic range in which to reproduce this. This generally means selectively compressing and expanding the range of tones we've captured to best utilise the medium we're working with.

The classic 'S-curve', used to enhance contrast, gives us a steeper line through the mid-tones. This means that a narrower range of input tones are being mapped across a wider range of output tones, thus increasing mid-tone contrast and detail. At the same time, whenever we expand the tonal range in one region of an image, we have to compress it somewhere else – in this case the contrast in the highlights and shadows is actually being reduced.

Photoshop also shows a histogram plotted along the horizontal input axis. This gives us a graphical representation of how the pixels are distributed in an image by their tonality. If most of the information sits, for example, in the mid-tone shadows region, then a standard S-curve probably won't optimise how we're increasing the contrast. Instead we might offset our S-curve, so the tonal range of the source image being expanded is centred around where we see the peak on the histogram.

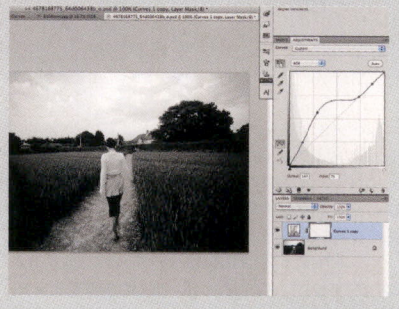
The histogram may also reveal empty space at the top of the highlights or at the bottom of the shadows region. This would mean our image isn't making use of the full tonal range – the blacks might not stretch to pure black and/or the whites might not stretch to pure white. This can be fixed by dragging the bottom-left and/or top-right points of our curve horizontally →

Equalising pictures with control points

Make the most of the range and detail in your image by manipulating a Curves Adjustment Layer

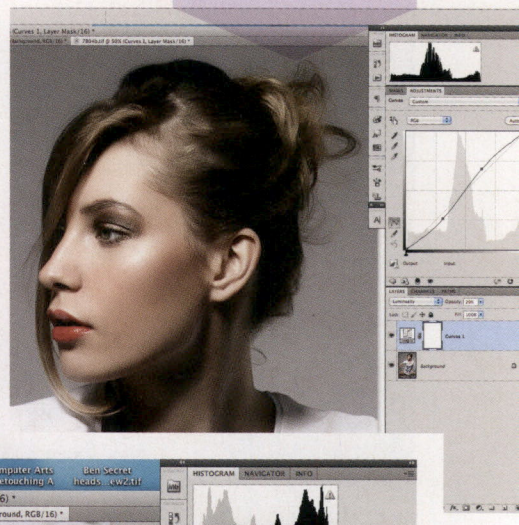
01 The landscape here suffers from a common problem in that the sky is so much brighter than the ground that we lose range and detail when trying to accommodate both in the same image. With a Curves Adjustment Layer, firstly we'll click the finger icon (top-left of the Adjustments panel) so we can create control points and modify the tonal curve in the appropriate regions of the image.

02 Click on the lightest and darkest areas of the sky – everything in this tonal region can be left alone. Now click on the lightest and darkest regions of the ground. As our control points are aligned to the tonal values of the input image along the horizontal axis, we only need to move them up or down, so now just raise the brightness for both of the ground's control points.

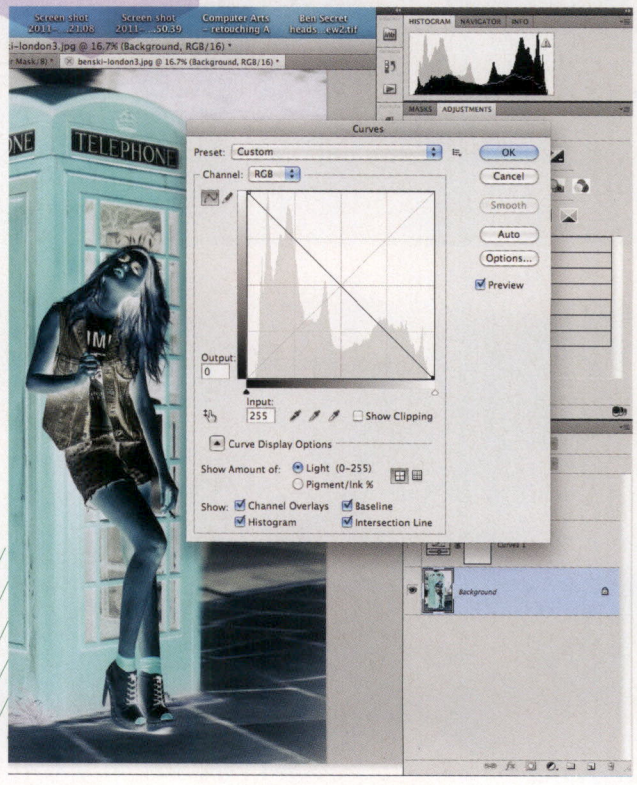


03 This raises the brightness on our ground while leaving the sky untouched, resulting in a more balanced image which makes more effective use of the available tonal range. There is, however, a limit to how far we can raise the ground's brightness relative to the sky before we start to create a flat area of very low contrast where the curve approaches horizontal.

Change blending mode to **Luminosity** for the adjustments to effect only light, not colour



Dragging the bottom-left point to the top-left, and vice versa, **inverts the image**, remapping the lightest pixels to the darkest and the other way around



→ along the input axis, ensuring the curve starts where the information on the histogram comes in. This is setting the image's clipping points.

We can also drag these outer points on our curve vertically up and down our output axis. If we drag the bottom-left point to the top-left, and the top-right to the bottom-right, we invert our image – the lightest pixels being remapped to the darkest, and the darkest to the lightest.

One thing that's typically avoided in a curve is any horizontal curve regions where there's tonal information. If we take the bottom-left and top-right points to the middle, our image becomes grey, as every pixel – regardless of luminosity – is being remapped to 128. Where a curve nears horizontal, image data in that region becomes uniform and desaturates completely, as a previously broad range of red, green and blue tones are all being mapped to a very narrow output range. Conversely, where a curve nears vertical, we tend to get posterisation and clipping, as a very narrow range of input tones are being spread across a wide range of output tones. It's generally preferable to work in

Make the most of curves

1/ Note the histogram

The histogram in the Curves tool shows how tone is distributed throughout an image. It can be easy to overlook this, but it can actually give us a very good idea of where we could be expanding the tonal range and increasing the contrast in our image – for example, where there's a lot of content to display – and where it can be safely reduced and flattened.

2/ Freehand Drawing mode

As well as control points – designed to produce smooth curves – the Curves tool has a Freehand Drawing mode, accessed by selecting the Pencil icon. This enables us to draw very sharp or abstract curve shapes, and move the pixels of a curve around independently. Holding Shift while clicking enables you to draw straight lines between points.

3/ Inspect with Curves

Curves can be very useful when inspecting an image for flaws. If we have a surface that needs to look smooth, we can create a very exaggerated S-curve so that the whole tonal range of our output is being used to display information from a selected range. Applying an exaggerated curve temporarily as a top layer can make dodging and burning much easier.

4/ Play the grey card

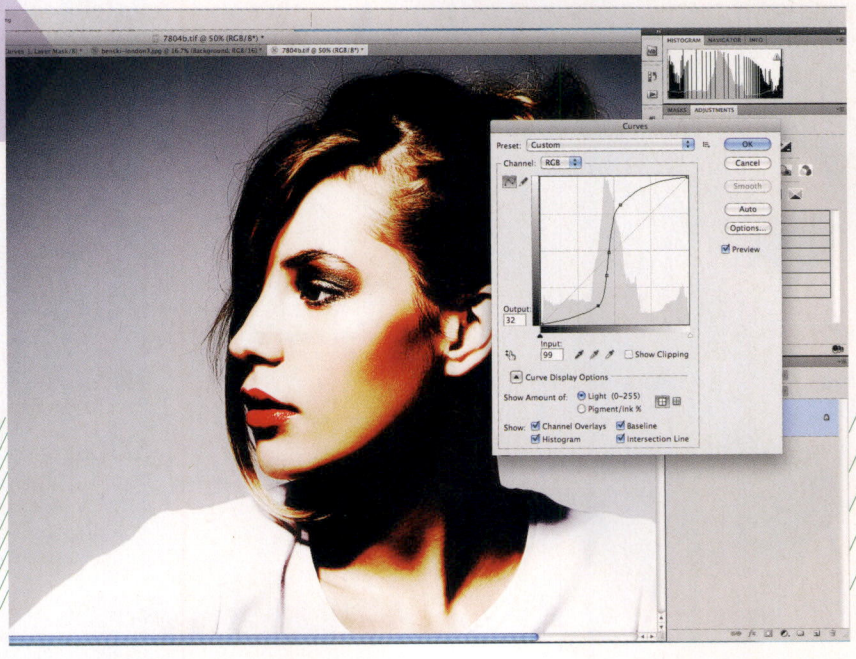
Correcting the colour balance of an image can be simplified by using a grey card. If we take a picture of a scene with a piece of card or an object we know should appear grey in it, we can tell the computer to calibrate all of the image colours to this. The Curves tool has a tool specifically for this task, represented by the icon of the grey eyedropper.

5/ Be selective

Many of the most useful jobs that can be done with Curves won't be global image adjustments. The ability to apply a Hide All mask to a Curves Adjustment Layer opens up a lot of selective adjustment options – it can become a lightening/darkening brush tool, or a tool to perhaps selectively paint red into shadows and subtract green from mid-tones.

To increase **contrast on skin**, locate two control points, either end of your desired tonal range, that can be pulled apart vertically

Vertical sections of a curve mean a narrow range of input tones are spread across a wide range of output tones, resulting in clipping and posterisation



16-bit mode rather than 8-bit to minimise effects like banding and posterisation.

This also demonstrates how colour saturation is affected by a curve's steepness. Where we increase contrast, we increase saturation. This effect generally isn't problematic, but when colour saturation shifts become noticeable, a workaround can be to make sure we're using a Curves Adjustment Layer and switch its blending mode to Luminosity. Now the Curves layer only affects image luminosity, leaving colour information displayed underneath unaltered. Adjustment Layers are generally preferable to applying Curves directly to an image, as it's a nondestructive and more editable process.

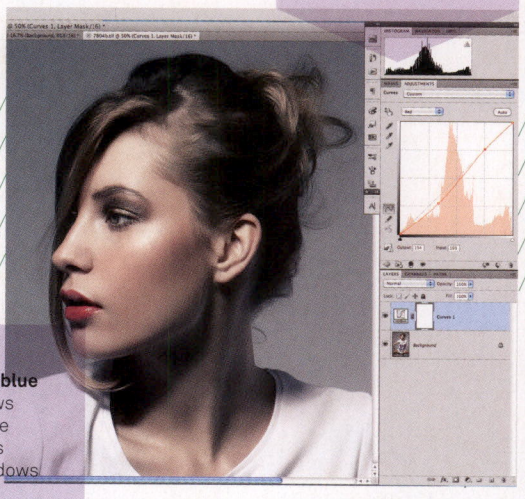
The Curves tool also helps us to control each colour channel's tone curve separately. This enables us to perform simple colour balancing by raising or lowering each colour channel's mid-point. It also enables us to change the white and black points in an image by dragging the clipping points of the colour curves. These can also be set using the 'set white point' and 'set black point' Eyedropper tools.

The flexibility of using curves means we can either add or subtract colours from highlight or shadow regions very selectively. For example, if an image has an unwanted green hue in the shadows, we can construct a curve on the green channel which leaves everything unaltered apart from the region we want to adjust.

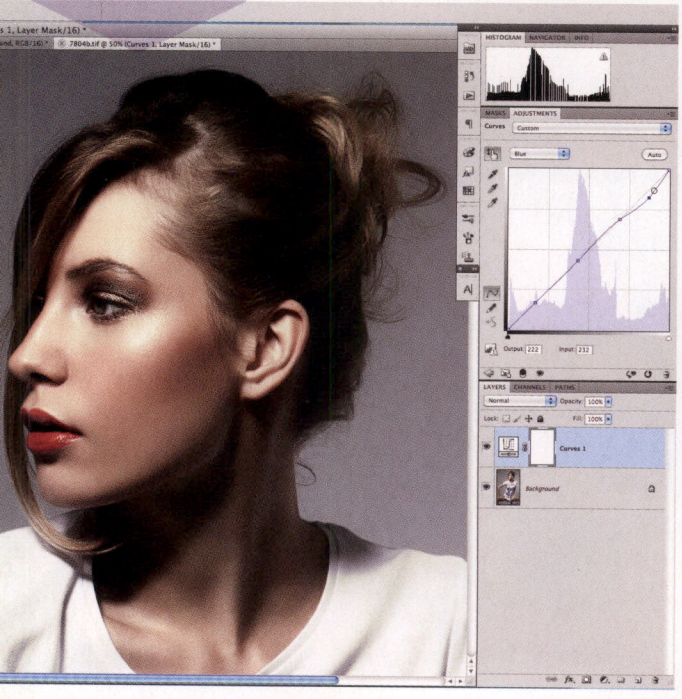
A very useful tool for making precise adjustments like this is the finger icon 'Click and drag in image to modify the curve'. With this selected, by hovering over an image on either the RGB or any of the individual colour channels, you'll see directly on that curve the tonal value a particular point in an image occupies. Clicking on the image will then add a corresponding control point to the curve.

So if we want to increase the contrast on a subject's skin for instance, we can use this tool to click on a bright and a dark region of skin, giving us two control points that we can pull apart vertically so that that tonal range specifically is spread across a wider range of output values, increasing contrast exactly where it's needed. →

Adjusting **Colour curves** can create stunning stylistic effects. Reducing red gives cool highlights...



... While **subtracting blue** from shadows and mid-tone regions gives warmer shadows



→ If we have too much blue in the highlights of a subject's skin, we can select the Blue channel in the Curves tool and use the Finger tool to create a blue curve control point precisely where we need it. Before dragging it down, we would normally create a number of set control points on the existing curve's plot to maintain the Blue channel's tonal data in regions where it doesn't need altering.

We can also create stylistic effects using the Colour curves. For example, we can give ourselves warm shadows by adding red and perhaps subtracting blue from the shadow and mid-tone regions, and give ourselves cool highlights by adding blue and reducing red further up.

Adding stylistic colour curves

Give your image added edge and cool shadows by compressing Blue channel tonal range

01 Cross-processing attempts to emulate the effects of developing film in the inappropriate type of solution. This results in unusual colour shifts in highlights and shadows. The backbone of this effect is frequently tonal range compression in the Blue channel. To achieve this we can simply use the clipping control points to rotate the blue curve clockwise.

02 This also shifts the white and black points. With more blue in the shadows, the black point is brought towards blue, while with less blue in the highlights, the white point is brought towards yellow. If we were shooting with a white backdrop, or we just want to protect our whites or blacks, we could perform the same action with an inverted S-curve instead.

03 We can create an even more subdued look by doing something similar in the Green channel: adding a slightly more subtle inverted S-curve. And we can create a more dramatic look by taking the bottom-left point on our RGB channel towards the right, to crush the blacks a bit, and taking our top-right point left, to subtly clip the highlights.

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It's the method of choice for selecting and isolating individual areas. But what else can be done with Paths? We delve deeper into one of Photoshop's most commonly used tools...

The pro's guide to PATHS

A minimum 0.4 **feather via the Paths palette** will smooth the edges of your selection and help bed images into your background...

... Although bear in mind that, should you want a **hard high-contrast edge**, this effect won't be suitable

Five paths tips

1/ Add feathers to smooth

To smooth the edges of your selection and help bed images into your background or white page, when selecting a path add a minimum 0.4 feather via the Paths palette. And always check the Anti-Aliased option. This isn't advisable if you need a hard high-contrast edge, however.

2/ Duplicate your paths

If you have need to create multiple paths of a similar shape, you'll find it considerably quicker to duplicate the path and transform it to your desired shape. This is best kept to simpler paths where it's easy to maintain accuracy.

3/ Know what and where your paths are

For speed in creative workflows, name your paths so that they relate to the area they're being used to isolate. And never delete any paths, unless you are 100% sure you won't need them again; they don't take up much space and you can bet your bottom dollar that you'll need the one you deleted. It's not productive or fun to cut a path twice.

4/ Make it glow

Handy if you don't want to complicate matters with layer effects, you can apply small inner or outer glows or shadows to your selection via the Refine Edge dialog. If you use the Overlay or Layer previews, you'll see how accurate and speedy it can be. Save the selection as a mask, or use it there and then.

5/ Make vector masks from your paths

You can make vector masks from paths, which work like Layer Masks apart from that they're not editable as a raster image. As you physically edit the path, you'll see on-screen updates directly on the vector mask. This is good for hard-edged, complex cutouts that may need adjustment.

Photographs: Richard Grassie

Where accuracy is imperative, Paths gives you, as a designer, illustrator or retoucher, confidence that even the most complex selections will be faithful to your intentions. Being able to use these selections in different formats and integrate them into your professional workflow is key to using Photoshop to its maximum potential. As paths are easy to store and size-friendly, they are a great way of archiving your original selections to be used for conversion into professional workflow intermediates such as Layer Masks, Alpha Channels, Spot Colour Channels, strokes and the like.

Initially, you might think of a path as a method of cutting an element out of an image, but for a creative professional that's just the first step. Paths can be used to help you when altering colours: when you need to alter many different areas of colour within one image, use the Path tool to determine which area you want to work with. While this isn't the only way to alter colour, the method can help you ensure that your work is editable and highly accurate, as you can save your paths and name them relating to the subject area. This will be useful should you need to return to a specific clip – if, for instance, your client decides they don't like a particular colour.

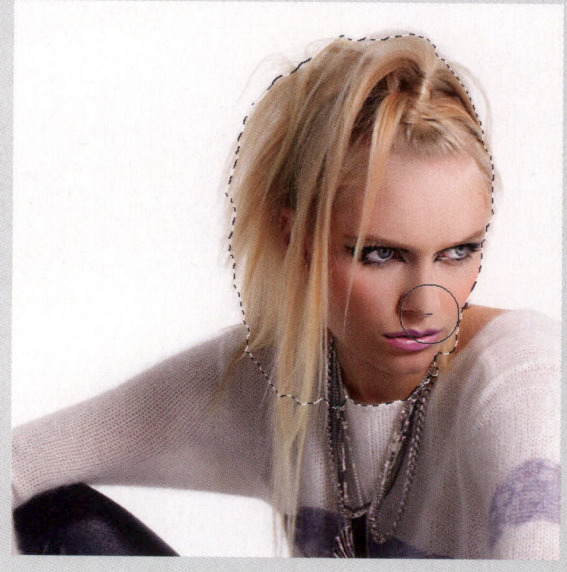
One Photoshop function that enables you to further fine-tune your paths and selections, plus save time when creating paths, is the Refine Edge tool. This tool is fantastic when you're creating photorealistic comps that need to be accurate whilst also giving you the flexibility to 'refine' selections beyond the realms of polygonal shapes. Refine Edge enables you to shrink, expand, feather, soften or sharpen your selections quickly and easily.

With all of the above, plus Paths' integration with InDesign's cross-program functionality, to achieve truly outstanding results it's paramount that we master what's generally considered simple, and example being editing paths. Paths are more editable than they appear: in addition to altering anchor points, you can use the standard in-image transformation controls (with the exception of Content Aware Scaling), plus you'll get some good results with your shapes using the Warp tool.

We can also use paths and strokes to add some individuality to an artwork or image, such as lighting streak →

Refining a selection to create a hair mask

The enhanced Refine Edge feature is a highlight of CS5, making your selection process much easier

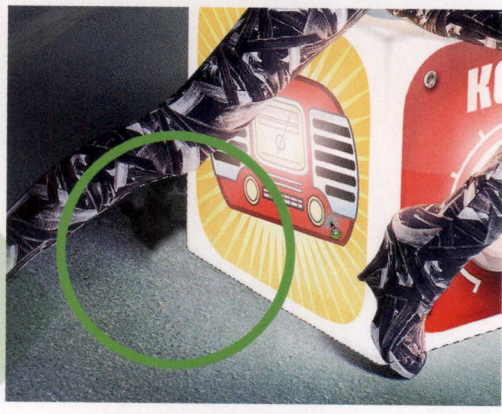


01 Firstly, open hairgirl.jpg from the disc (DiscContents\Resources\Paths). We want to isolate the hair using Refine Edge, so create a new layer underneath the girl, and fill with colour values C: 65, M: 25, and Y: 25 (this is the destination background colour). With the Quick Selection tool, click on girl layer then, with a hard brush (size 125), brush around the edge of the hair only.

02 Go to Refine Edge (Ctrl/Cmd+Alt/Opt+R). Set View mode to 'On layers', then check Smart Radius, and set the Radius value to 95. Check Decontaminate Colours, (which removes the usual fringe of colour showing from your background) and set the Amount value to about 65. Choose to output to 'New Layer with Layer Mask'.

03 Now change the View mode to 'Black on white'. You'll see a detailed mask, which was previously more complex to achieve, and took much more time. That's why this updated feature in CS5 is the key to getting the most out of simple paths and/or selections. Once you're happy with it, click OK and see your high quality mask in your Layers palette.

Sometimes you need to accurately **limit the area** you're working on. Here we need to remove the dirt from the floor without affecting the rest of the image...

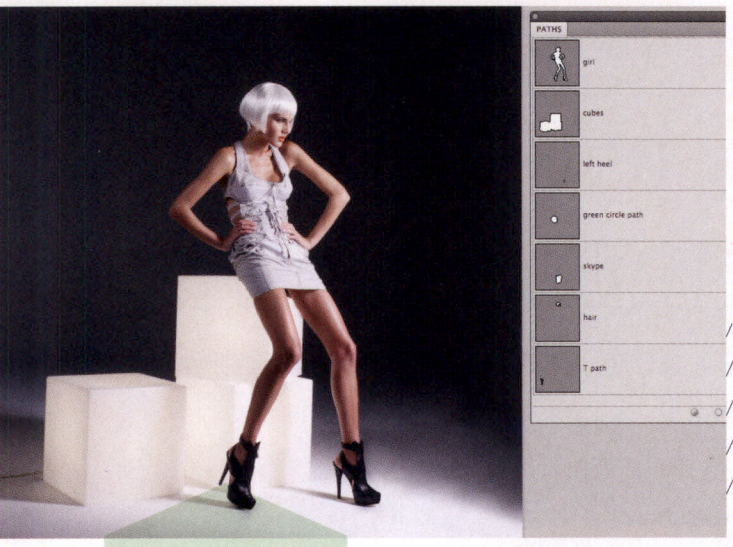


... So make a selection from your path of the intended area. **Keep it selected whilst cloning**, and other areas will keep their shape and position

→ lines (see the 'Create lighting effects using paths and strokes' walkthrough, page 30). Some illustrators draw nice free-flowing lines using a graphics tablet, but if you're not confident doing that you can also recreate this effect in a more technical way.

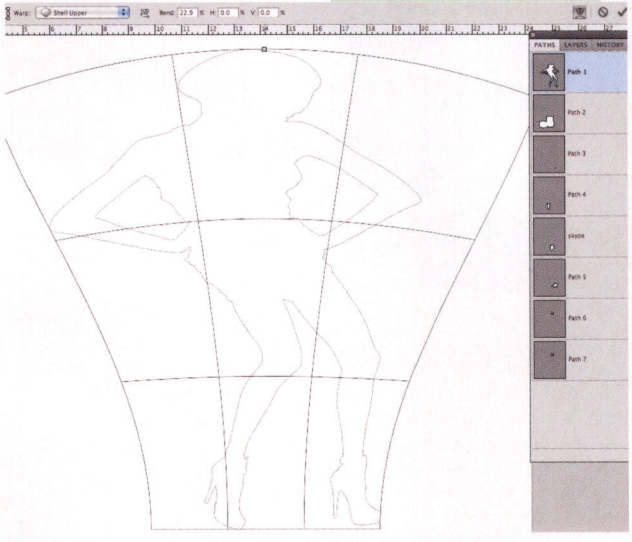
Paths and selections go hand in hand – don't underestimate the power of the Magic Wand tool or the Quick Selection tool, especially with the ability to hone your selections with Refine Edge. Before CS3, the Quick Selection tool was considered to be fairly crude, and it wasn't so easy to manipulate imagery into a highly accurate isolation. With CS5's Refine Edge tool, you have the bonus of being able to preview your selection on a number of different destination intentions – especially on the active layer – enabling you to adjust the settings to a professional standard that may have previously seen you re-visiting the same function repeatedly to get what's required. The option of outputting your selection to different saving methods, such as a new layer with a Layer Mask, again saves time.

The Refine Edge tool also enables better blending in multi-image comps. When cutting out models and placing them



When saving your paths, always name them **relating to the subject area**

In addition to altering anchor points, **experiment with the Warp tool** to get some interesting results with your shapes



into new scenes, for example, there will be occasions when the edge of the model selection doesn't sit well on the new background – probably due to lighting inconsistencies. If you take the selection into Refine Edge and utilise the Preview and Output modes to your advantage, you'll find that you can customise your selection to eliminate a large percentage of these incompatible areas.

Even when using the Quick Selection tool then honing with Refine Edge, the Edge Detection filter and the Decontaminate Colours sliders can transform a basic selection into a pro-standard isolation, even for fairly complex hair cutouts. If you're comping pics together and need to re-shape, you can clip using a path rather than manipulating the shape, provided you apply the right feather (see the 'Refining a selection to create a hair mask' walkthrough on page 28).

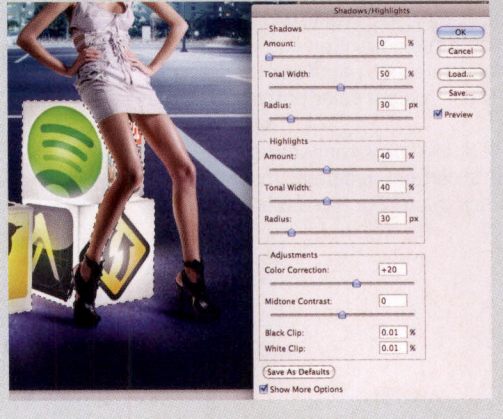
Paths are also useful if you need to enhance the detail of a particular area, without any added effects or manipulation being applied to any subsequent masks. When you need to sharpen an area in isolation, go to your Paths panel, select and

Modify colour using paths and selections

Use the Make Selection dialog for added accuracy when removing portions of a selection

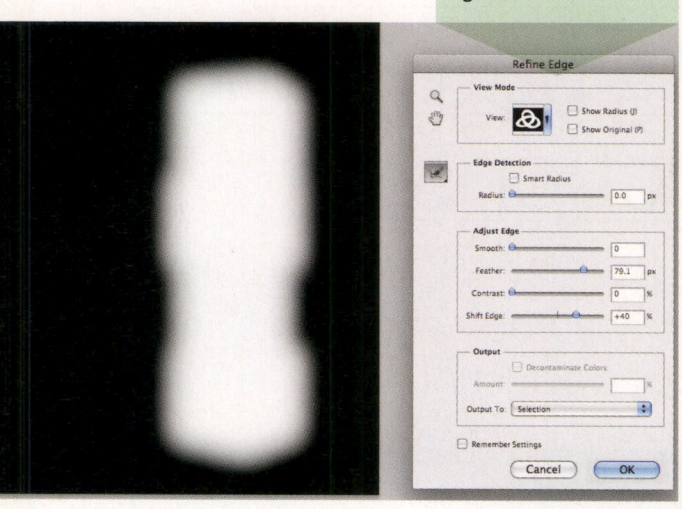
01 Open girl.jpg from the disc (DiscContents\Resources\Paths). We want to darken the background of the light cubes without affecting the model. Go to your Paths palette, where you'll see a path called 'cubes'. Right/Ctrl+click> Make Selection, then make the Feather Radius value about 0.5.

02 With the selection active, select the 'girl' path and choose 'Subtract from Selection'. You have now removed the girl from your cube selection – a term that's known as 'knocking out'.

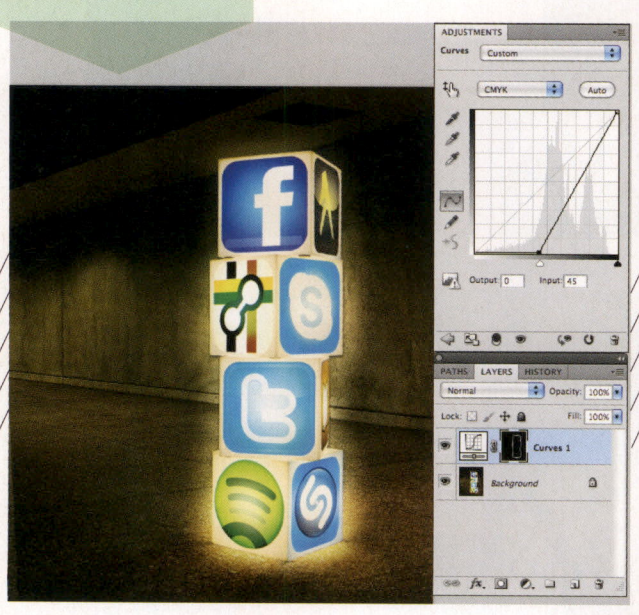


03 Now to darken the cubes. With only the cubes selection active, go to Image>Adjustments >Shadows/Highlights. In the dialog, make the Shadows amount 0, Highlights amount 40 and Tonal Width 40. Set Radius to 30. This has a darkening effect on light and mid-tone areas without over-inking the dark areas, and it's not possible to do this accurately without the two paths.

Simpler than layer effects is the application of **outer glows**, shadows...



... or inner glows to your selection via the **Refine Edge** dialog



→ sharpen to the clip of your desired area. It's the same principle with cloning: limit the area that your cloning spreads to by activating a path selection. This is great for those tricky fine areas or edges. In addition, if you need to remove portions of a selection accurately when compositing, just create your path then select and remove the part of the selection you no longer want, using the options in the Make Selection panel and the relevant paths needed (see the 'Modify colour using paths and selections' walkthrough, on page 29).

You can 'pro up' your workflow by evolving your paths and selections into masks, which is certainly a defacto method in the creative and colour retouching industry. For more, take a look at the Channels guide on page 14.

Create lighting effects using paths and strokes

Use paths and strokes to give your images an interesting edge through bespoke effects

01 Open girl2.jpg (DiscContents\Resources\Paths). Create a free-flowing path, but don't join it up at the end. To simplify and smooth it, delete any points you can, and use Free Transform to hone. On a new layer, pick a soft brush (size 20px), set your foreground colour as a bright green, Right/Ctrl-click on your path, choose Stroke Path, set Tool to Brush and check the Simulate Pressure box.

02 Double-click the streak layer. Add two layer effects: green outer glow (Spread: 10, Size: 29) and yellow inner glow (Choke: 10, Size: 68) at Screen and 75% opacity. Convert layer to a Smart Object and add a Layer Mask. Select Filter>Distort>Wave. Set Number of Generators to 5, Wavelength to Min: 101/Max: 745, Amplitude to Min: 82/Max: 787, and Scale to Horiz: 1/Vert: 27.

03 Select the 'girl' path, then select the 'cubes' path, and choose 'Add to Selection'. Go to the Smart Object layer, click on the Layer Mask and, using black, brush over a few areas of your light streak that you would like to go behind the girl and/or cubes or interweave between them.

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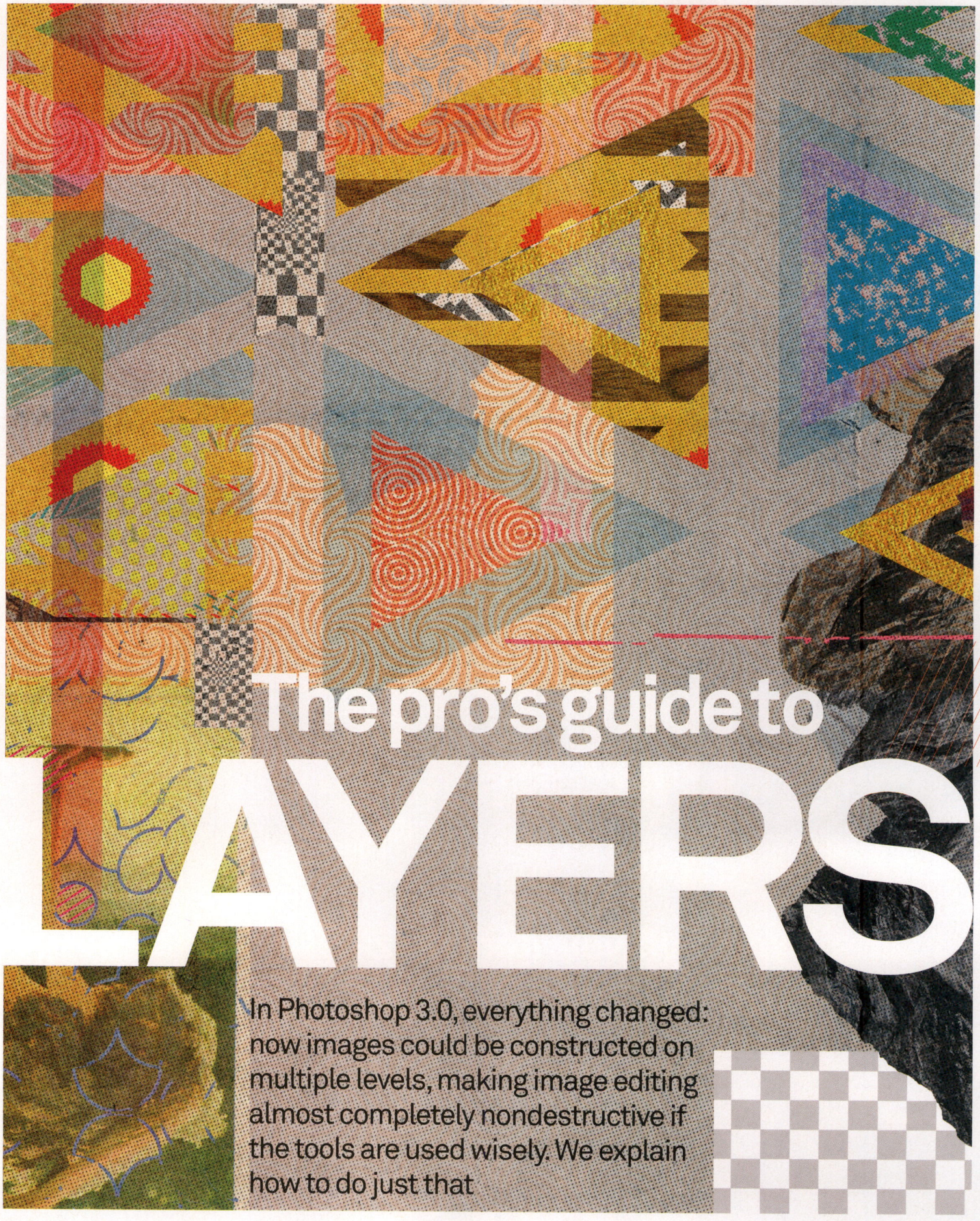
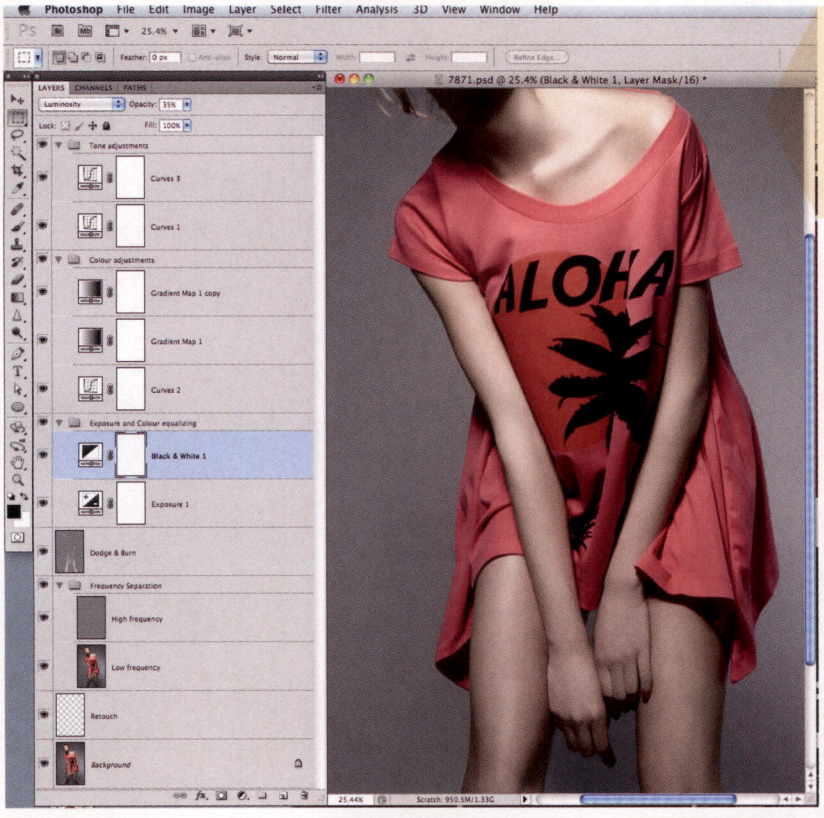


The pro's guide to LAYERS

In Photoshop 3.0, everything changed: now images could be constructed on multiple levels, making image editing almost completely nondestructive if the tools are used wisely. We explain how to do just that


Photoshop File Edit Image Layer Select Filter Analysis 3D View Window Help
7871.psd @ 25.4% (Black & White 1, Layer Mask/16) *
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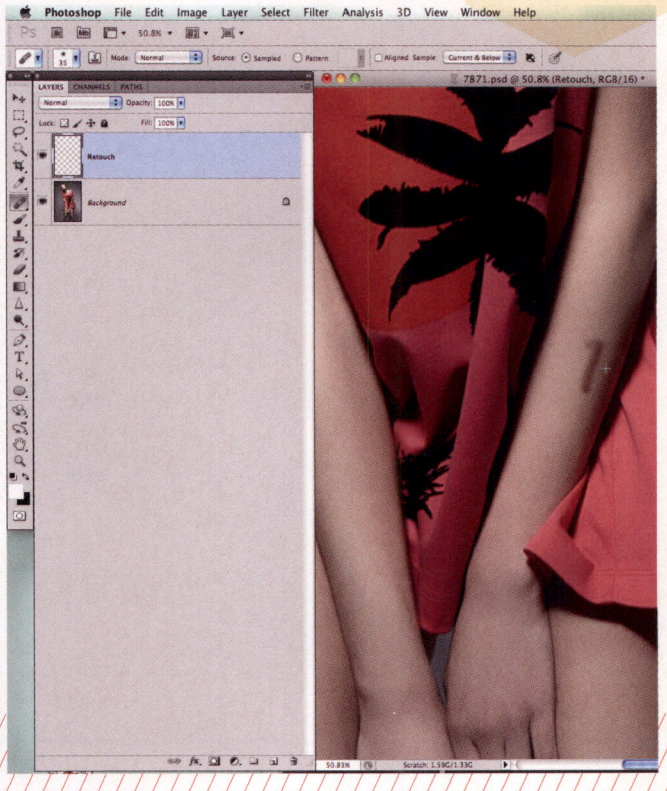
An **efficient workflow** for retouching an image, or tweaking your illustration work is typically layered, as pictured



Create a **separate layer** on which to perform simple image edits

Erasing a regular layer (as opposed to a background layer) will reveal a transparent back

Layers were introduced in Photoshop 3.0. Where before you would be editing pixels on a static digital canvas, now an image could be constructed over many levels, acting more like the transparent cells used in animation. This proved to be quite a revolution, and meant that image editing in Photoshop could suddenly become almost completely nondestructive.

The basic use of layers is to split image elements up so that they can be modified, positioned and brought in and out independently. Being nondestructive, any changes made to an image should be easy to modify or erase at any later stage.

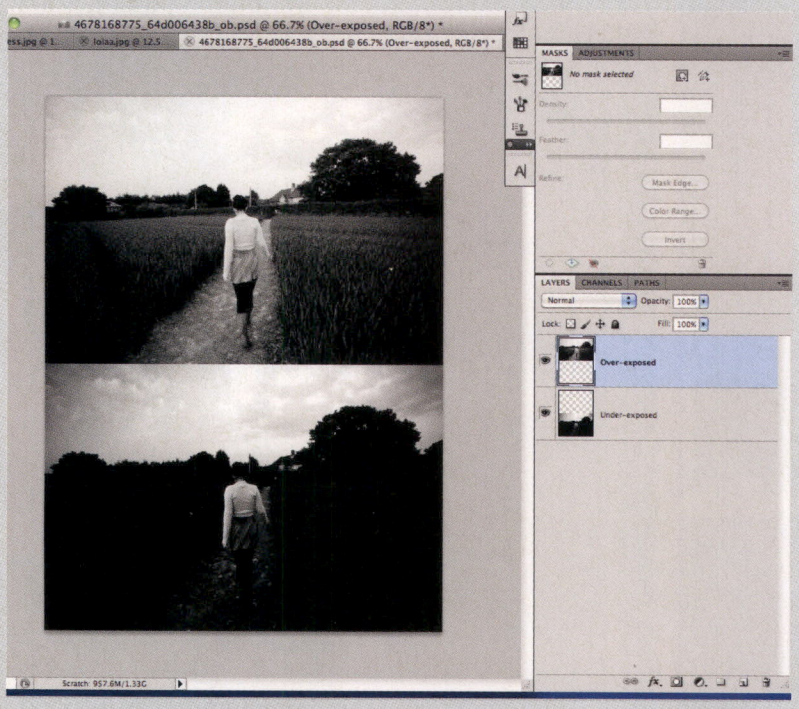
A typical image editing workflow in Photoshop would start off with your source image loaded as a background layer. This layer is generally best left alone, so we can reference and retrieve anything we might need from it later, with all of our edits and adjustments being made on separate layers. The background is the simplest type of layer: it's not moveable, it offers no blending options and it's not maskable or erasable. A background layer can be turned into a regular layer by Right/Ctrl-clicking on it in the Layers palette and selecting Layer from Background. Apart from being moveable, you'll now find that when this layer is erased or masked, you're left with a transparent backdrop. This can be useful when creating web graphics.

The first kind of alterations we make to our image will often involve cleaning up details and flaws using Photoshop's array of brush tools. Of course, rather than painting directly on our source image, we can create a new layer and label it something like 'retouch'. As well as the standard brush and pencil, we can modify this layer using image data underneath it with tools such as the Healing brush and Clone Stamp, as long as they're set to sample Current and Below layers.

One set of tools we can't use on our retouch layer, however, are the Dodge and Burn tools. Dodging and burning on →

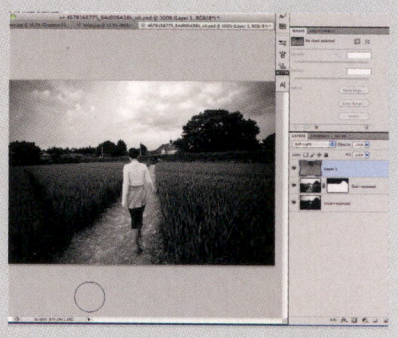
Blended exposure

Try a little processing trickery with multiple shots to boost realism in a single output image



01 It's not uncommon for photographers to employ processing tricks to create images that closely approximate how we perceive the world. An example of this is when we want to increase the dynamic range of a photograph, perhaps to capture a bright sky and a dark ground in full detail. For this we ideally need two identical images taken (or at least developed) at different exposures.

02 To create a basic blended exposure image, we need one image that was exposed properly for the sky, and another that was exposed for the ground. Here we've loaded the underexposed image on the bottom layer, and the overexposed image on the top. All we need to do now is add a mask to our overexposed image and, using a black brush, mask out the sky, revealing the properly exposed sky underneath.



03 Once we've got the increased dynamic range and digital information from blending two or more different exposures, we can further manipulate and balance the lights and darks in our image using Dodge and Burn. For this we can create a new layer, from the Layer menu, select a Soft Light or Overlay blending mode, tick 50% grey, and then paint on it with a white or a black soft brush set to a low flow.

Create a layer with a soft light blending mode to **dodge and burn** effectively

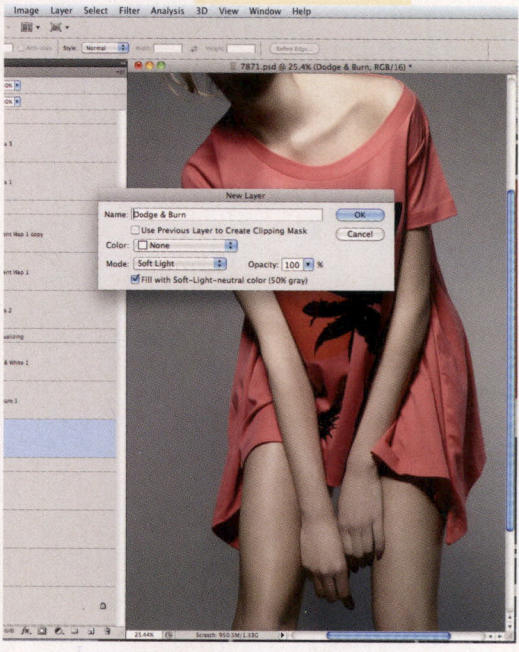
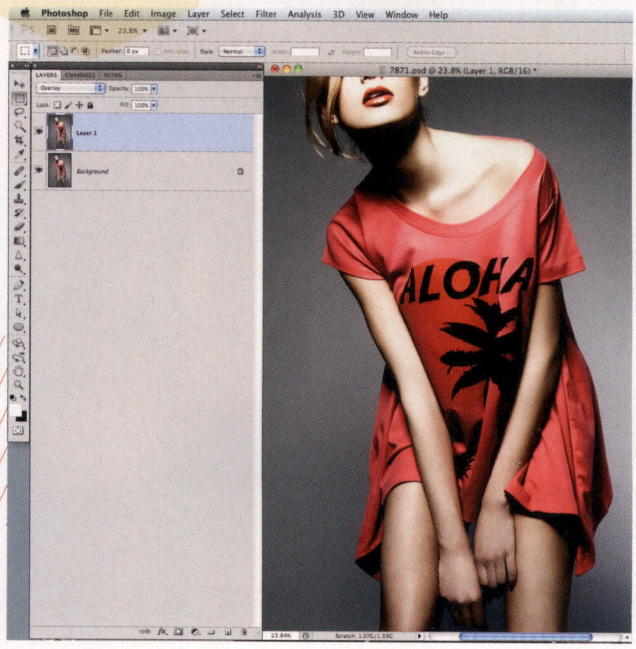


Image Layer Select Filter Analysis 3D View Window Help
7871.psd @ 25.4% (Dodge & Burn, RGB/16) *
New Layer
Name: Dodge & Burn
OK
Use Previous Layer to Create Clipping Mask
Cancel
Color: None
Mode: Soft Light
Opacity: 100 %
Fill with Soft-Light-neutral color (50% gray)

Using the **Overlay blending mode** will overlay one image onto a copy of itself


Photoshop File Edit Image Layer Select Filter Analysis 3D View Window Help
7871.psd @ 23.8% (Layer 1, RGB/16) *
Layer 1
Background
ALOHA

→ a separate layer requires a different blending mode or type of layer. So now we can create another layer specifically for lighting and darkening. A simple way to do this is to go to the Layer menu, create a new layer, set the blending mode to Soft Light and tick the Fill With Soft-Light-Neutral Colour 50% Grey box.

Blending modes are essentially different mathematical formulas used to change the way a layer is overlaid on the image beneath it. When we set a layer to Soft Light blending, any pixels on it which are lighter than 50% grey will lighten the image we see coming through from underneath, while any pixels darker than 50% grey will darken it. So filling our Soft Light layer with 50% grey makes it effectively transparent. Rather than lightening and darkening our source image, we can lighten and darken this grey layer instead. And this can be done with either the Brush Tool – set to paint in either white or black – or with Photoshop's standard Dodge and Burn tools.

Layer tips for pros

1/ Keep workflow nondestructive

It's generally best to keep layered workflows as editable as possible so we can go back and amend any changes we make to an image, should the need arise. This is usually aided by having the source image and any brush-based edits occupying bottom layers, while colour and tone adjustments occupy the top. We can also use Smart Layers on image layers so we can apply any effects nondestructively.

2/ Clipping Masks

Clipping Masks can be used on image layers so that the contents of one image masks the contents of another. For example, with black selected as our foreground colour, we can create a text layer as a base and write on it. Add an image layer on top and turn it into a Clipping Mask by Alt/Opt+clicking in between the two layers in the Layers palette. We'll now have the image showing only where there's text.

3/ Effects as Clipping Masks

If we want to apply an Adjustment Layer such as Curves so that it affects only one specific layer and not those underneath it, we attach it to the layer as a Clipping Mask. This can be done by Alt/Opt+clicking or selecting Create Clipping Mask from the Layers menu. We can also chain Adjustment Layers and blending modes together in this way, which will allow for complex colour and tone effects.

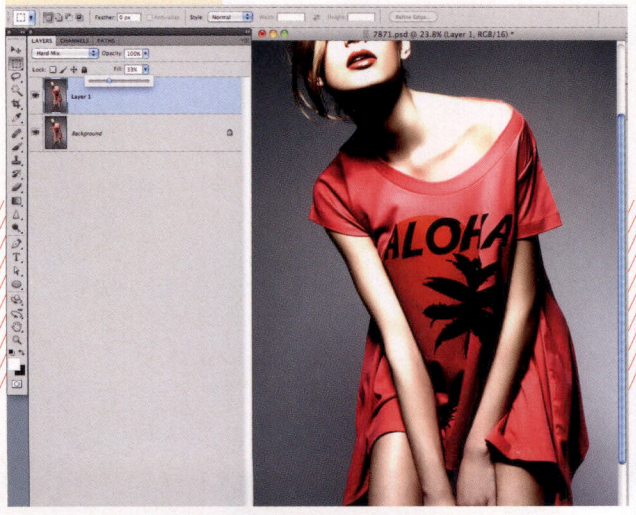
4/ Linking layers

Sometimes we might be dealing with many separate image layers which need moving as a unit. For example, we might have a hat we've composited onto a subject, and want to reposition them together. For this we can use the Link Layers function. Selecting multiple layers, we can quickly link or unlink them by selecting the chain icon also in the Layers palette, or by selecting Link Layers from the Layer menu.

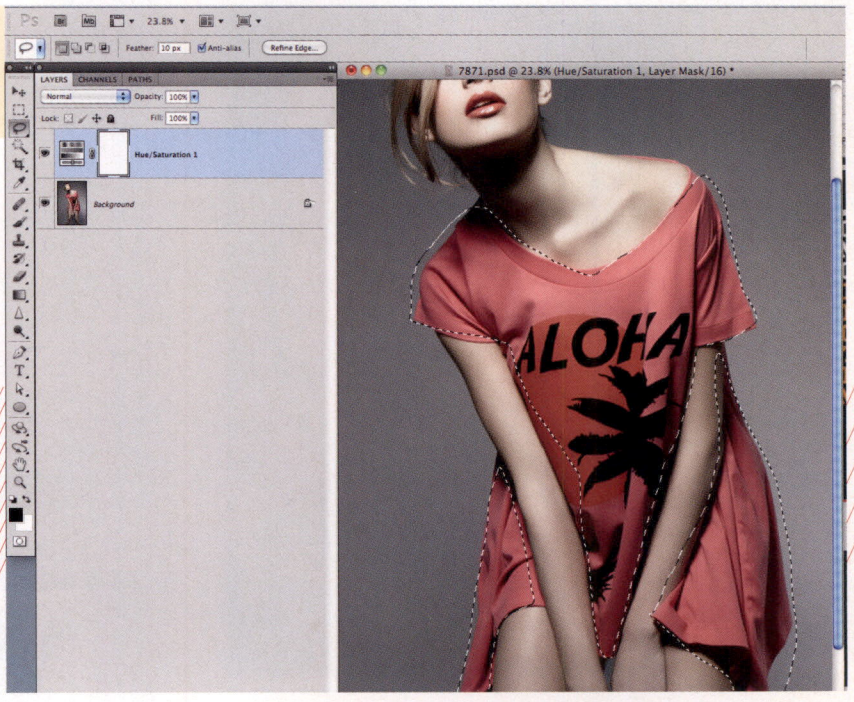
5/ Blending Options

Right/Ctrl-clicking on an image or Adjustment Layer in the Layers palette enables us to open Blending Options. Many of these effects are for embellishing text or simple shapes, but among the most useful are the Blend-If sliders. We can use these to select, by luminosity, which parts of this layer (or layer beneath) are mixed together. Split and contour blending points by Alt/Opt+clicking them.

Using the **Fill slider** will change the strength of an effect quickly and easily



Draw a selection over an image to **mask an Adjustment Layer**



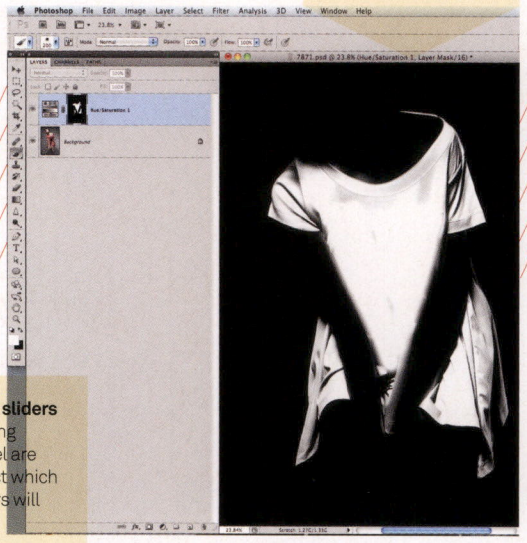
Layers and blending modes can also be used to create a variety of stylistic effects. For example, overlaying our image with a copy of itself set to Overlay blending will give us increased contrast and punchier colours. If the effect's too strong, we can tone it down by reducing the Opacity or Fill levels of our new layer.

The difference between Opacity and Fill is that Opacity controls how strongly the layer, with its associated blending mode, is mixed in, while Fill controls how strongly the layer is mixed in before it's processed with its blending mode. This difference only becomes obvious when using blending modes that have a strong level-dependent effect, such as Hard Mix. In these cases we may use Fill, rather than Opacity, to tone down the strength of the effect, rather than just toning down how strongly it's mixed in. The best way to understand this is certainly to try it out for yourself.

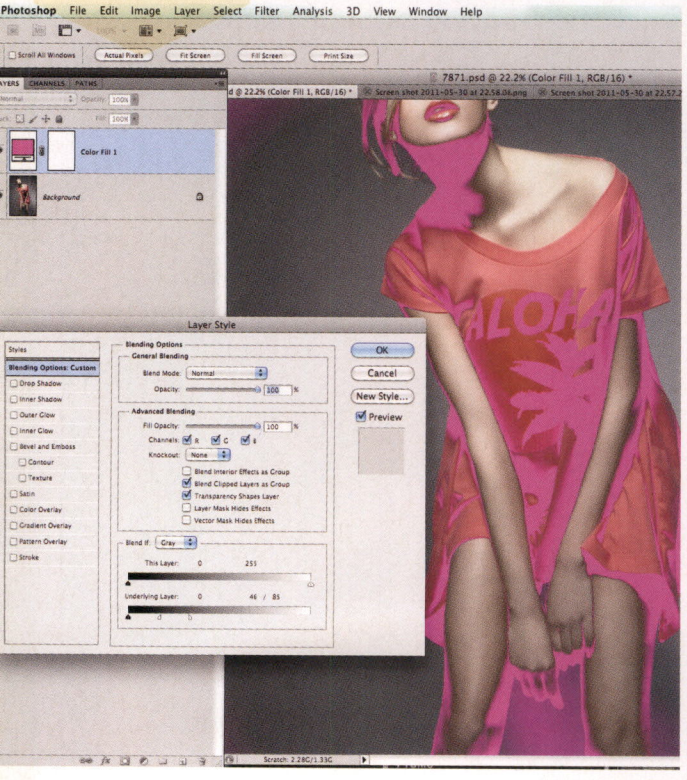
In a layered workflow, we don't actually need to use a copy of our image data on another layer to use these blending mode effects. An Adjustment Layer set to do nothing will act in exactly the same way – as a virtual copy of the image underneath – and enables us to keep our workflow flexible whilst saving memory. So instead we can simply create a Curves layer and set it to Overlay blending. At this stage it can be useful to start grouping our layers. Layer groups can act as a simple way to keep our layers palette tidy and organised, but they can also be masked and mixed in with different blending modes themselves for more advanced effects.

Once we've cleaned up and edited our image, we'll typically want to add some Adjustment Layers so we have control of the overall tones and colours. The kind of adjustments we make will tend to be either global or local: if we want to colour balance our whole image, we simply create a Colour Balance Adjustment Layer; if we want to change the colour balance of a specific region in our image, we might instead use the Lasso Tool, with a fairly →

Edit a layer mask by Alt/Opt+clicking it in the Layers palette



The Blend-If sliders in the Blending Options panel are used to select which parts of layers will be blended

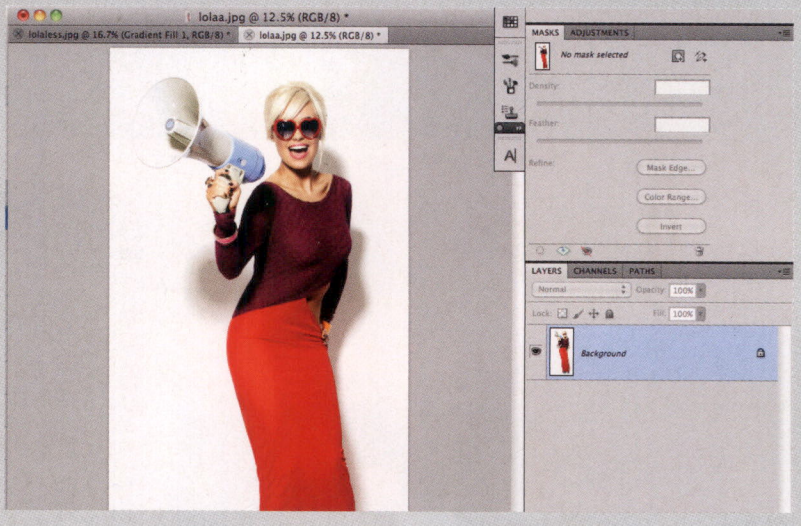


→ high Feather setting, to select that region before adding our Colour Balance layer. This will add the Adjustment Layer with a ready-made mask, meaning any adjustments we make on this layer now will only affect the region we've selected – unless we choose to edit our mask further.

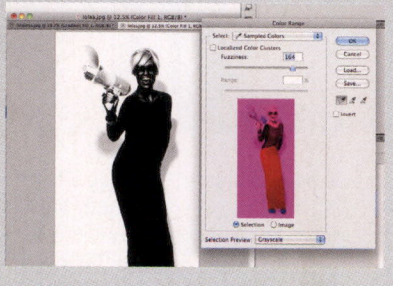
Masks are central to working with layers. In addition to making local adjustments, in situations where we might want to cut out and composite two or more images together, a mask acts as a nondestructive alternative to using the Eraser tool. Anything we mask out by painting the mask black can be retrieved at any point by painting that area of the mask white.

Add a gradient to a shot with a white backdrop

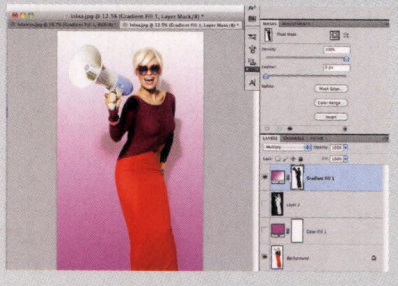
Add a Gradient Map to a shadowed background without affecting your foreground subject



01 Using layers, Photoshop offers a wide variety of ways to separate a subject from a simple background. In this case we want to add a Gradient Map to the white backdrop here. However, this is made difficult by the grey shadow on the wall, which will need to respond naturally to the new background colour. So the first thing we can do is create a purple Solid Colour layer and set its blending mode to Multiply.



02 Create a new image layer, and, selecting this purple as the foreground colour, go to Colour Range in the Select menu. With Sampled Colours selected, we move the Fuzziness slider across until we have the body of our subject fairly well separated from the background. We can now OK this and fill the selected area in black. Now copy this image to the clipboard and make both of these layers invisible.



03 We can now create a Gradient Adjustment Layer going from purple to white. Selecting the Gradient layer's mask by Alt/Opt+clicking on it in the Layers palette, we can now go to Paste Special and Paste in Place, to paste our black selection into the mask. Invert this Layer Mask with Ctrl/Cmd+I. It's now easy to edit any flaws in our mask manually, using the Brush tool, set to either black or white.

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A Creativemasterclass from the makers of arts

Justin Maller

With painstaking attention to detail, this Australia-born, New York-based illustrator gets the most from a pared-back set of Photoshop tools

Justin Maller
Working out of Brooklyn, freelance illustrator and art director Justin moonlights as creative director of the depthCORE digital art collective.
www.justinmaller.com

Justin Maller has come a long way since he cut his teeth with Photoshop 4 in the mid-'90s. But with an impressive client list that includes Nike, Coca-Cola and Sony now under his belt, he reveals that, for him, it's more about blood, sweat and tears than fancy bells and whistles.

"I don't use filters, and I don't really use many tools," Maller confesses. "I use fundamentals like the Colour Adjustment tools, which has existed forever. My work doesn't have much trickery: it's just blue-collar grind-it-out, sit-on-it-for-hours stuff."

Maller has settled on "digital photomontage" to describe his style. "I used to use the term 'hyper-real', but that's a bit pompous," he grins. "My work used to be very centred around abstract 3D, but I've worked hard to create work that doesn't lean on it as a crutch anymore. I still incorporate renders, especially for client work, but I'm trying to use them to accentuate my concept and composition rather than form the foundation." →

01

01 'Empyrean' was created for depthCORE's *Mirror* chapter. "I like how immersive and inviting it is," says Maller. "I try not to look at it though: all I see is things to change!"

02 "I got a lot of mileage from my rock stock photography in this one, by being creative with masks and hues," says Maller of this 2011 depthCORE piece, **'Harvest'**

03 'Vessels', Maller's surreal alien-style landscape created for Desktopography in 2010: "It took a lot of precise etching, and the Warp tool to manipulate shapes."

02

03

04

→ Commercial work aside, Maller is perhaps best known as the founder and creative director of the depthCORE collective, not to mention a core member of collaborative global design studio The Keystone Design Union (KDU). As a result, he's constantly trading ideas, techniques and inspirations with talented Photoshop pros from all around the world to keep him on his toes, and he happily credits several regular collaborators who have inspired his very meticulous approach: "In terms of execution, the gold standard is Nik Ainley, AKA Shinybinary. He has moved on to work with a lot more 3D than photographs these days, but the time and care he puts into executing his pieces is an inspiration to me for sure."

Maller also name-checks Emeric Trahand, AKA Takeshi, for a similar attention to the finer details. "He just has a lovely finishing style," says Maller. "Seeing the beautiful and graceful touches he puts on his work made me realise that there is an entire art to just finishing and presenting your final work." See Trahand's work for yourself on page 82.

Swedish designer Niklas Lundberg, AKA Diftype, is the third creative to get a mention in Maller's rollcall of inspiration: "In terms of imagination, he is one of my very favourites. The way he can take one object and build and transform it into this elaborate construction really exemplifies the ethos of making the most of what you have."

Based on regular conceptual 'chapters' that prompt its members to respond with pieces of abstract artwork, depthCORE survives on boundary-pushing self-initiated work, and Maller believes it's crucial for forging fresh ideas, techniques and approaches that can then be carried forward into commercial briefs.

"Those random moments of invention are one of the best aspects of personal work, and my 'mad scientist'

04 Maller used soft brushing to create atmosphere in **'Skye Harbour'**, a snowy scene strewn with antique artifacts such as a globe, an ornamental mirror and a broken armchair

approach (no sketches or flimsy ideas) is actually very conducive to these kinds of discoveries," he explains. Maller's distinctive skin-texturing technique, for instance – now a staple part of his style – was first developed for a personal exhibition. "I actually find it works the other way around too; when a client asks you to do something that you haven't done before, and you need to figure out a way to make it happen, you learn a technique by force," he reasons.

A recent apparel design for Nike was based on LA Lakers player Kobe Bryant, whose nickname 'The Black Mamba' set the creative wheels in motion. "I interpreted it literally, and built a fairly complex illustration around that central snake idea," reveals Maller. Nike provided an original photo of Bryant from the Olympics as a starting point. "He was wearing his white USA uniform, so I had to edit that substantially," Maller continues. "Aside from this, I sourced quite a few snake photos, and then modelled and rendered off a bit of 3D."

After Maller had etched the photos out and rendered the 3D elements, it was a case of knuckling down to the composition itself in Photoshop. "I wanted to integrate him into the snake form in a way that was fluid and realistic, so it was quite time consuming," he admits. "Getting a good-looking fusion of the body and the snake was certainly challenging, but the biggest obstacle was getting a good balance. Composing is my favourite part of the process – it's like putting together a jigsaw."

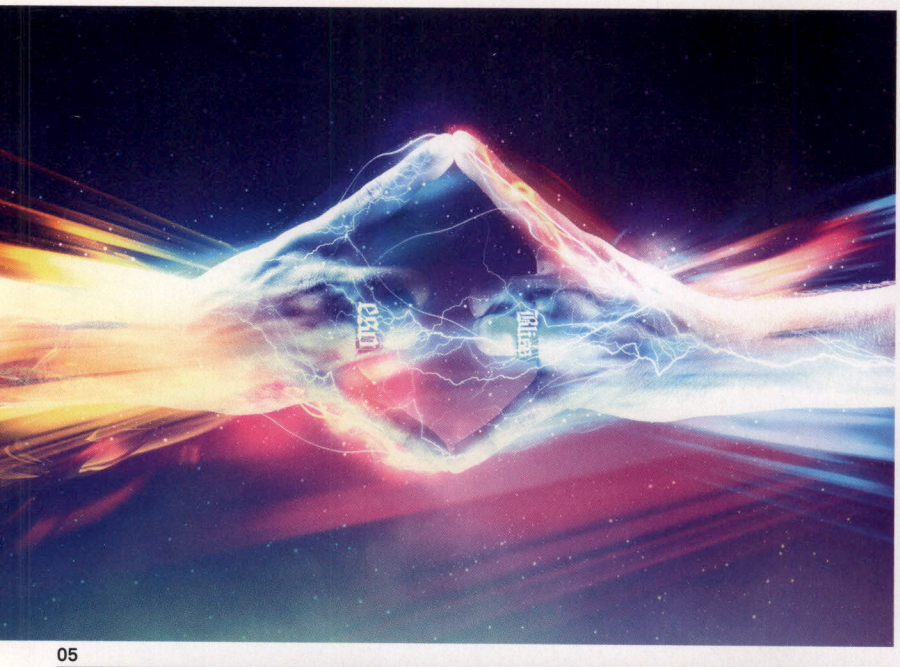
While the Nike piece took around 70 hours in total, Maller often invests considerably more time than this in his self-initiated projects for depthCORE. 'Empyrean', for instance, was created for the *Mirror* chapter and took more than twice as long in total. →

05 This 2011 poster for **Bliss N Eso** gave Maller a chance to experiment with long-exposure camera trickery, using various glowing things in the house

06 'Portal', Maller's type treatment for Game Slice: "I used the 3D elements as an alpha mask of sorts for the creeping vines, to make integration easier."

07 A 2009 apparel design for **Rich Soil Clothing**. Circular selections and the Feather tool with masks were used to create spherical highlights

08 This 2010 wolf design was part of the same series for **Rich Soil**, and incorporates stock images of trees. "I thought a little outside the box," says Maller



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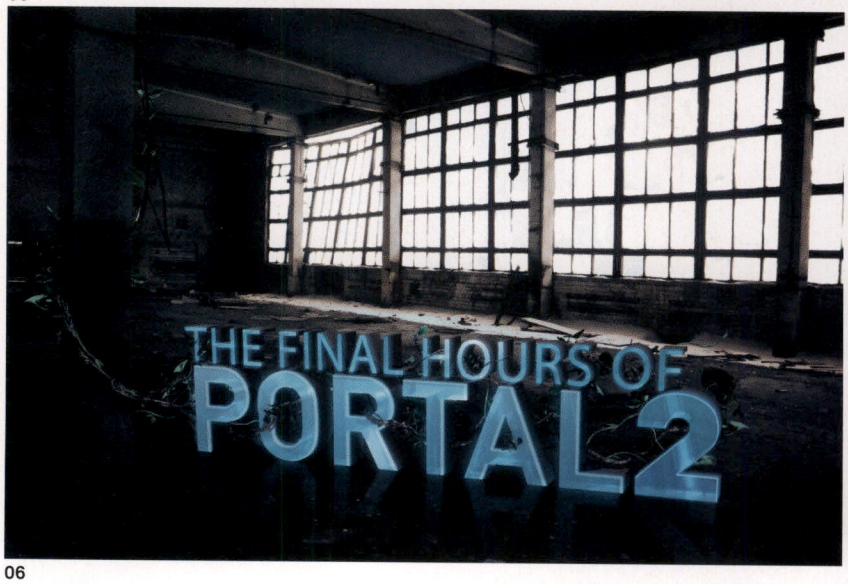

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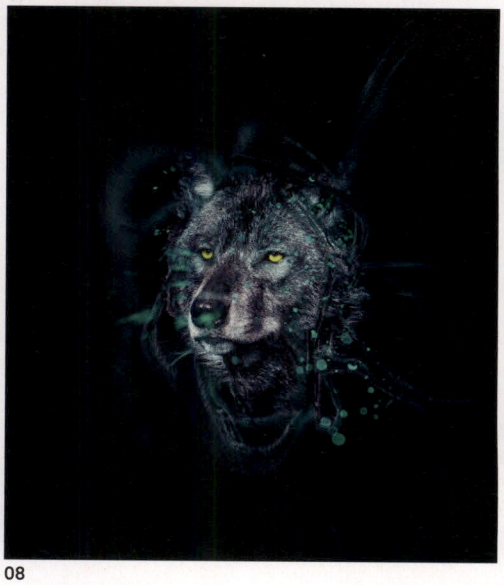


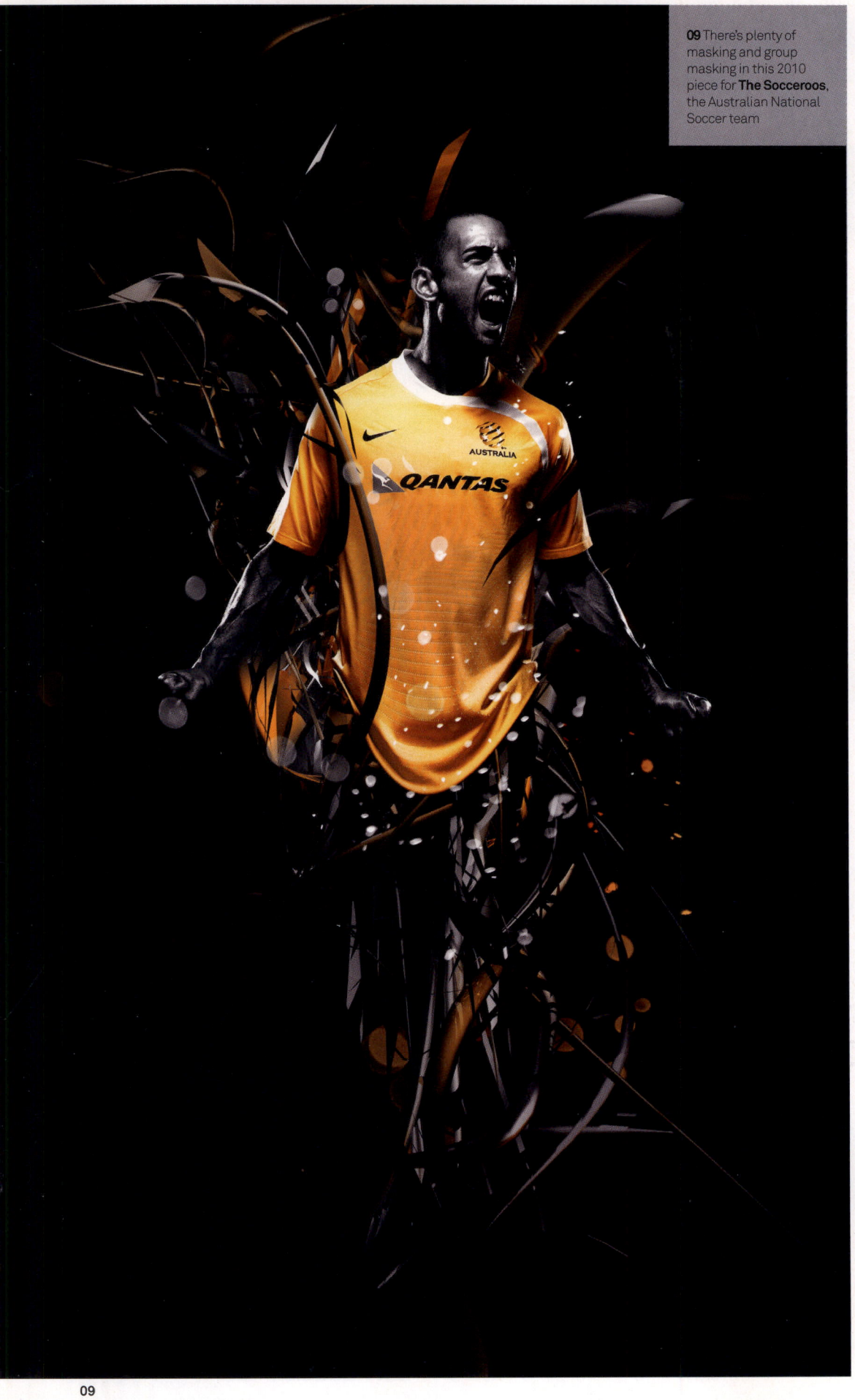
08

→ "I chose to use the chapter's theme to reflect on the way that we live, and the environment we surround ourselves in," Maller explains. "I live in Brooklyn, and I was actually at my girlfriend's parents' place in the suburbs of Pennsylvania when I noticed the great leaves and vines twirling around their balcony. I asked her dad to snap off some of these vines and leaves, and then took it all home and created this piece. It's kind of an ideal habitat."

After a commercial job fell through, Maller had plenty of time to indulge his perfectionism on 'Empyrean', dedicating 150 hours to it. Never one to glamorise his Photoshop process – which he summarises simply as "etch, compose; etch, compose; sit, think; etch, compose" – he relishes creative challenges rather than technical ones: the vast majority of his stunning work is realised using simply the Pen tool, the Move tool and Curves.

"Staying with it and not settling for a lesser outcome was, I suppose, the biggest hurdle," Maller concedes, "although to be specific, creating that central pool and waterfall effect in a non-cheesy way was probably the toughest component."

For Maller, the future of Photoshop illustration lies in the attention to detail that he swears by, and he foresees fellow artists spending ever longer refining the tiniest of details: "The standard of excellence has moved up a long way in the last few years, and I see it rising further and further. It can't be pulled off in a day or two anymore; creating something world-class is a real endeavour these days. I think those with the most patience and commitment will come out on top."



09 There's plenty of masking and group masking in this 2010 piece for **The Socceroos**, the Australian National Soccer team

09

Maller's top tips for Photoshop success

1 Mask, don't erase

"Layer masks are your friends, and the Eraser tool is your enemy," declares Maller. When working on different areas of a complex image, never rely on Step Backwards to save you if it all goes pear-shaped: always keep all the original information in your layers, and mask it out. You may end up with a huge stack of layers, but it gives much greater control over the image at every stage.

2 Apply masks in bulk

If masks on individual layers make the creative process smoother and easier, it follows suit that applying them to multiple layers at once can be a powerful technique. "Groups with masks on them are Layer Masks' friends, and therefore yours by association," is Maller's way of putting it. "Working out that you can apply a mask to a group and then dump stuff in there will change your life."

3 Save your working

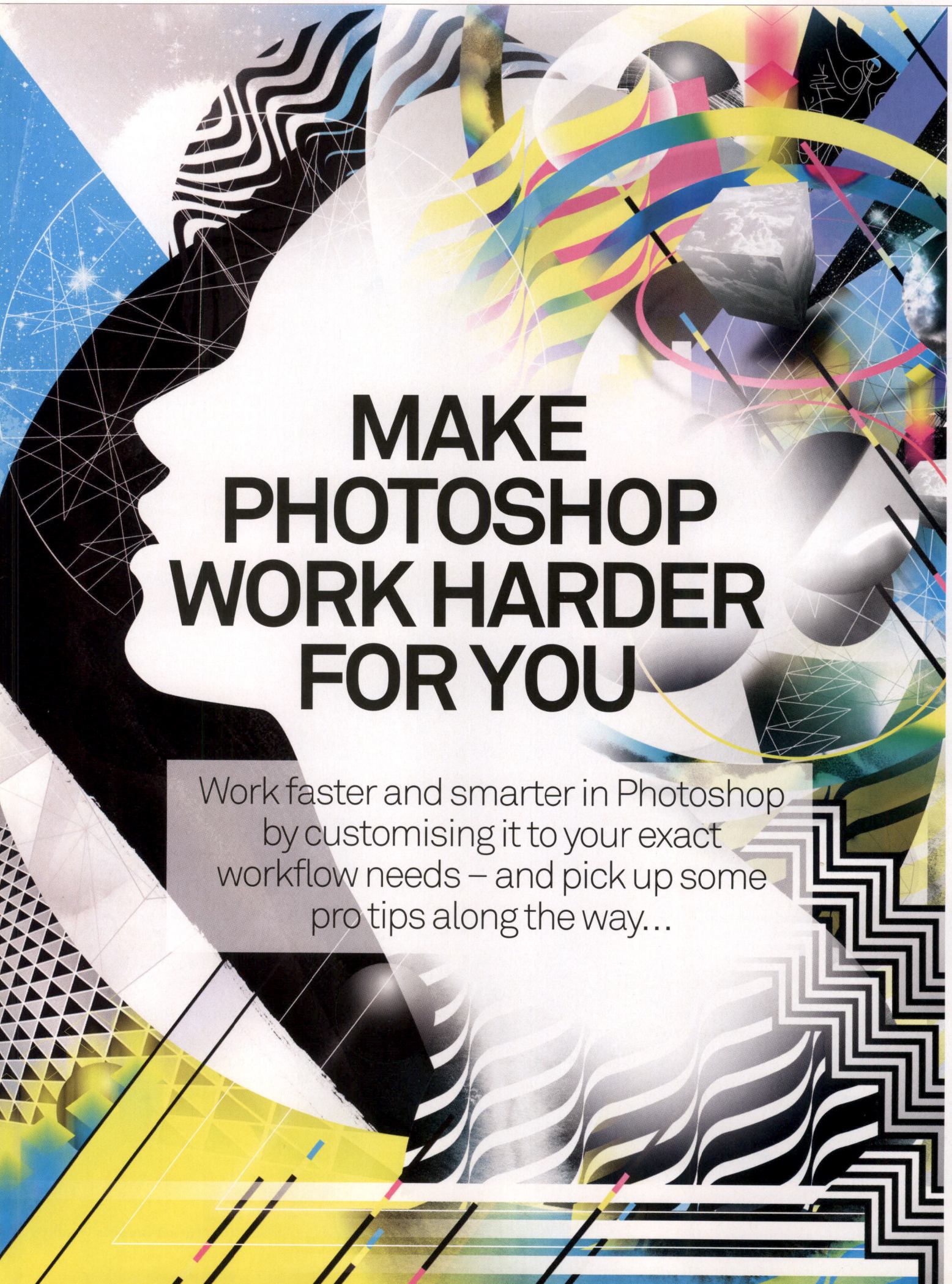
Rather than browsing different files and directories, it can save time to layer all your stocks and components within the same file. "I keep the original etchings of every element that I use in a hidden group at the bottom of my Layers palette," reveals Maller. "This way, if I ever need an element to treat in a new way, it's sitting there all ready to go."

4 Live on the edge

For many Photoshop artists, a neatly organised, named-up and colour-coded layer palette makes life a lot easier when dealing with complex files, but Maller proudly shuns this approach in favour of a more organic, intuitive method: "Labelling your layers is for wusses," he grins. "Just select the Move tool, Right/Ctrl-click and find your layer that way. Live on the edge."

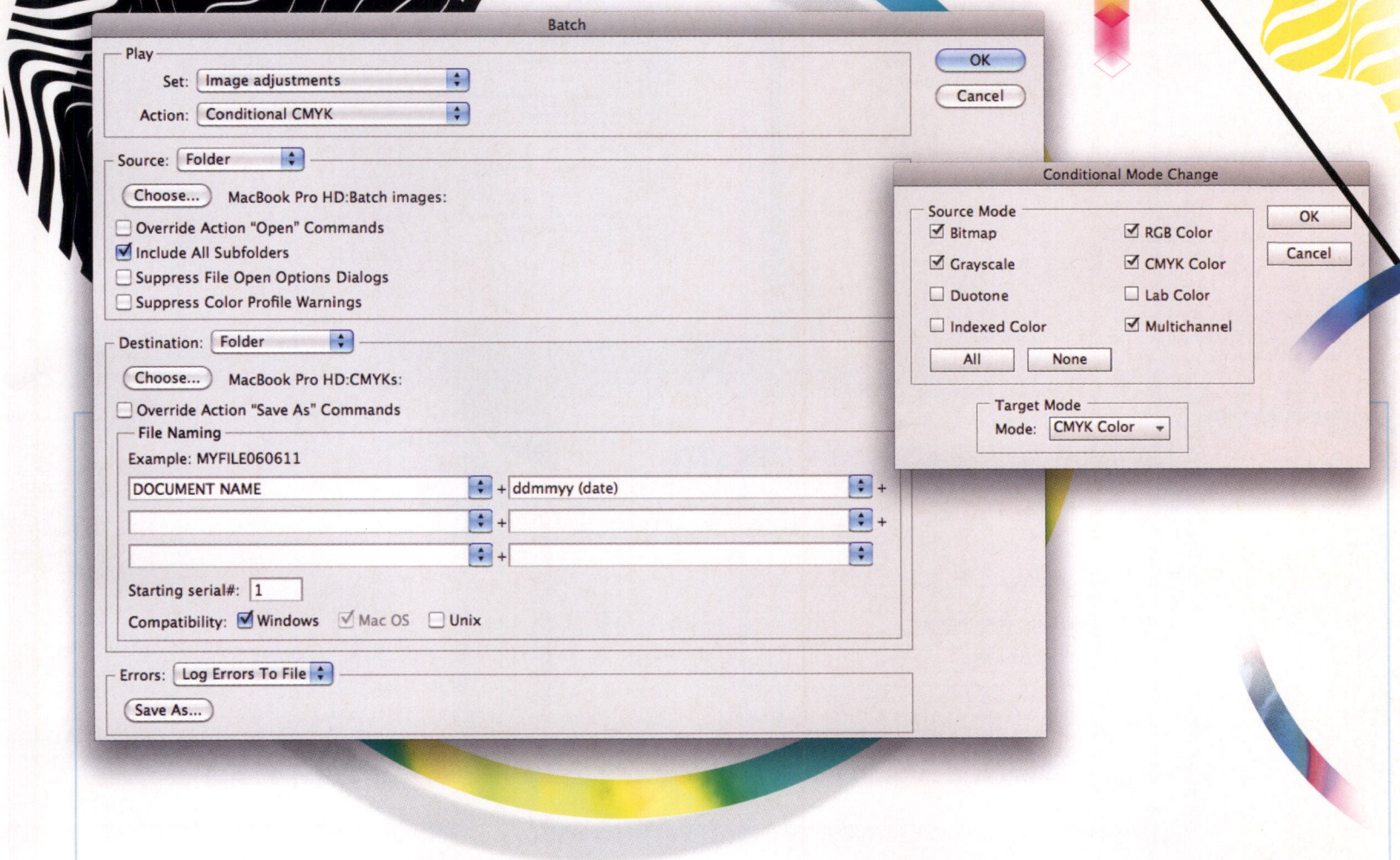
5 Brush up on shortcuts

Maller swears by the timesaving properties of keyboard shortcuts. "Learn them. Cmd+J (duplicate current layer) is my current favourite," says Maller, who often picks up tips and tricks from depthCORE members on the fly – another plus-point for the collaborative approach. "I think Pete Harrison told me Cmd+J," he recalls.



MAKE PHOTOSHOP WORK HARDER FOR YOU

Work faster and smarter in Photoshop by customising it to your exact workflow needs – and pick up some pro tips along the way...

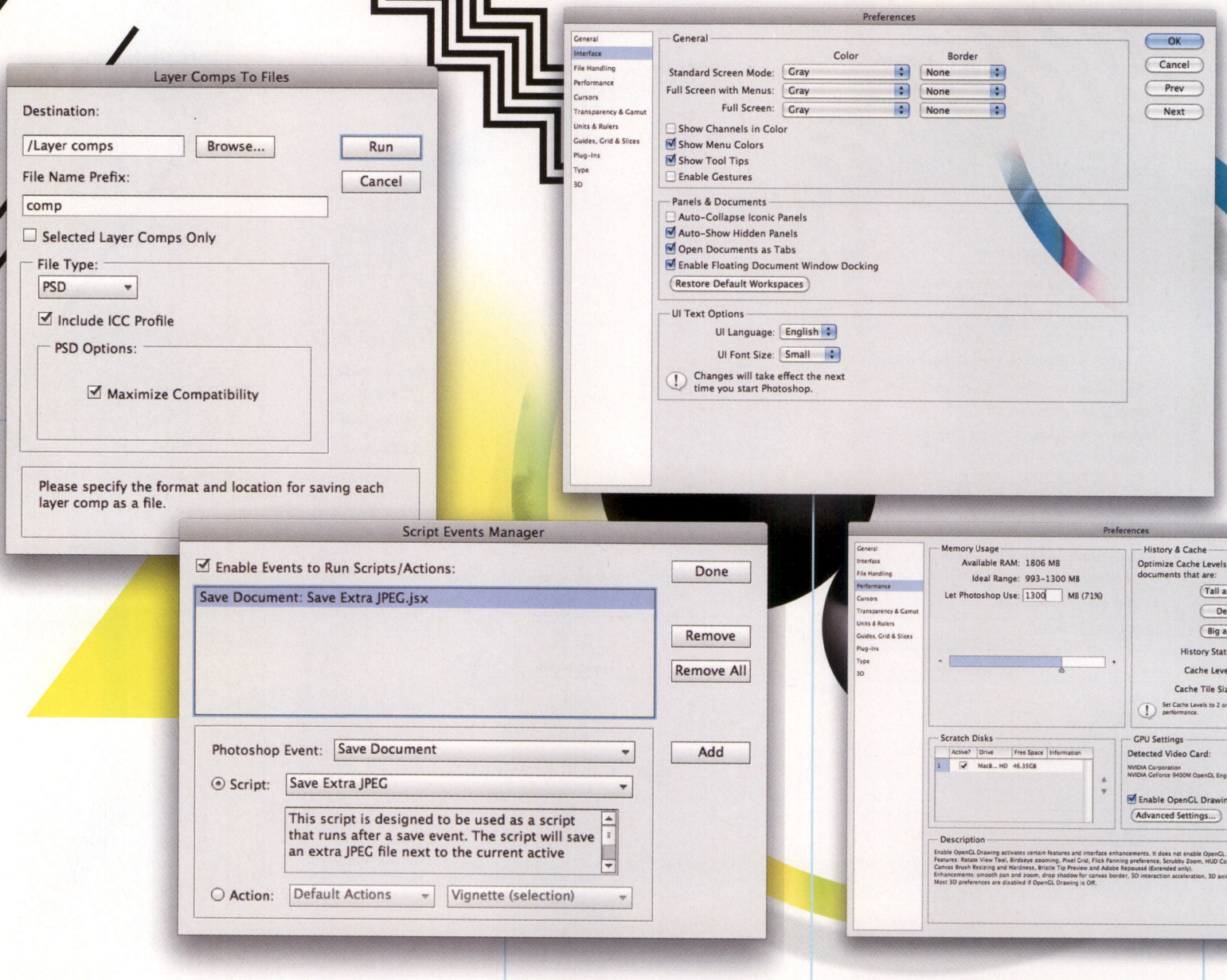


Photoshop has such a vast feature set that it's very easy to get drawn into a certain workflow that suits your day-to-day work. But you may not be doing things in the most efficient way – and, no matter how you look at it, this will hinder your workflow and give you less time for other, more important ideas-based tasks. So, what can you do to fine-tune your workflow? Well, a good place to start is the Automate and Scripts sub menus.

The Automate menu (found under File) is particularly useful if you're dealing with a lot of files on a daily basis. And especially useful – using the Batch command – if you want to apply the same corrections, effects or adjustments to many images at once. The process of setting up batch processing is a simple affair, but can save you huge amounts of time. The first thing to do is to set up an action or actions using the Actions panel. First though, open all of the images that you wish to apply the effect or transformation to. Then go to the Actions panel flyout and choose New Set. This creates a folder for your actions and keeps things organised. Next, go to New Action, hit Record and make your adjustment. You can even set a function key to save more time. But of course you know how actions work... Batching is simply running actions across multiple files, specifying save points. In the Batch dialog (File>Batch) you then choose the Action at the top in the Play section, followed by a source folder – where your images are saved – and then choose a destination for the saved files. It's usually best to choose Stop for Errors (when you're batching a relatively small amount of files) but you can save any errors to a log if you're batching a massive set and don't want Photoshop to stop. Handily, you can set up file naming by date (adding a ddmmyy at the end of the filename) to make sure you're always working to the right version. Droplets are another incredibly useful tool – check out the boxout on page 47 to make the most of them.

The other options in the Automate sub-menu aren't going to be of as much use on a daily basis, with, perhaps, the exception of Conditional Mode Change, which is a fantastic time-saver when used in conjunction with actions. Use it as part of your recorded action, specifying which image modes (RGB, LAB, CMYK and so on) you want to convert into a different image mode. It means you can choose to only convert CMYK images to RGB, for example. If the image the action is running on (and conditional mode change is used as part of this action) is already RGB, or a mode such as Bitmap or LAB, the image mode command won't run on that image, but the rest of the action will.

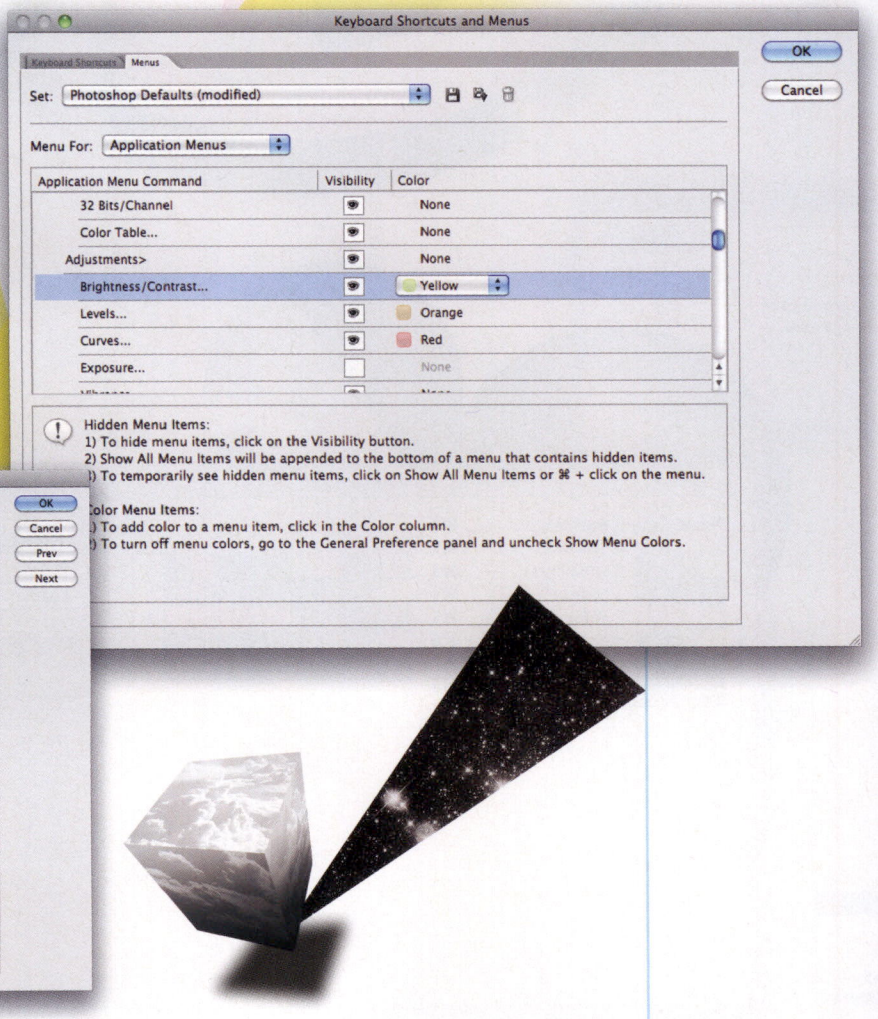
The second sub-menu under File that can really help speed up your workflow is Scripts. This sub-menu is



almost certainly not ventured into as much as it should be by designers – probably due to its name – but can prove a huge timesaver in your workflow. And the scripts in the sub-menu are just the beginning: Adobe and a number of other websites have a huge range of scripts available for virtually every purpose. A bit of time spent searching for the script you need could save you a lot of time in the long run. Scripts automate functions that would normally take a number of user commands to achieve. For instance, using the supplied scripts, you can delete all empty layers, flatten just layer effects and masks, export layer comps to files and more. You can even use the Scripts Event Manager to perform such events as saving an extra JPEG when you save a document. What's more, the Image Processor command in the Scripts sub-menu enables you to quickly open, perform an action on, and save documents as the same or different file types. It's a quick way of doing a batch command, but not as flexible.

The next step to improving your workflow and setting up Photoshop exactly how you want it is to pay a visit to the Preferences dialog. In order to make the application work – and look – as you want it (and not just in the default way) you need to have a grasp of what you can change. Some things are minor; some will really affect the way you use Photoshop. We're not going to go through every Preference pane, but will look at some that are important in ensuring Photoshop runs how you want it to. The first is the Interface pane. Along with Workspaces (which we'll come to in a bit), the options here can help you get Photoshop looking and working exactly as you want it. For instance, while the pane varies between versions, you can change the Standard Screen Mode colour from grey to anything you like (although you probably wouldn't want to, as it's grey for a reason). You can also change Full Screen Mode background from black to grey and choose to remove the rather ugly drop shadow from around your working canvas. It's really down to personal, er, preference. The ability to hide tool tips (which appear when hovering above a tool) and turn off gestures on newer Mac laptops should be done pretty much straight away, and purists might want to stop Photoshop opening documents up as tabs (which can be incredibly annoying). You can also change the UI font size here.

The Performance preference pane is also essential to getting the most out of Photoshop – especially if you're working on a Mac or PC with multiple hard drives. The first thing to do is up the amount of RAM Photoshop can use to the top of the ideal range. You can always adjust this if you need to work in other apps (or, if you just work in Photoshop, slide it above the ideal range). Scratch disks



Droplets: the key to quick batch adjustments

Setting up Droplets can shave hours off your weekly Photoshop workflow

Droplets are simply mini applications that, when you drop individual files or folders full of images on to them, perform batch actions in Photoshop – directly from your desktop. Setting up Droplets is a cinch, and is a must if you frequently perform batch processing on folders of images. First, make sure you have the action set up that you want to run as a batch operation – this may involve changing image mode (conditionally or otherwise) or another adjustment that you run on a regular basis. Next, go to File>Automate>Create Droplet, and choose the action you created earlier in the Play section of the dialog that appears. As in normal batch processing, choose a destination folder and whether you want to stop for errors or just log these to a file. Then save the Droplet to your desired location. Find your Droplet and drop your folder of images onto it. Photoshop will open up if it's not open already, and will perform the actions and save the files accordingly. Create Droplets for every regular command you use, and you'll save a LOT of time.

are important as well, and ideally you should assign your scratch disks as fast, internal or external drives (a large internal SSD will be very beneficial) and order them in terms of speed and capacity. And if you have a very fast graphics card with lots of video memory, try changing the OpenGL Advanced Settings to Advanced to free up more of your CPU and let the GPU take over.

It's a good idea to assess your guides and grid colours on a project-by-project basis, making sure they are visible and don't blend in with any artwork. Change the colours in the Guides, Grids and Slices pane. And, finally, setting up your cursors to display how you want them is a basic, but necessary, task.

We all know about customising Photoshop's shortcut keys (Edit>Keyboard Shortcuts) but another handy way to customise Photoshop to your needs is to get rid of all the menu items you just don't use in your workflow. It's extremely easy to remove them – just go to the Edit menu and hit Menus. In the dialog that appears, you can then choose to turn off menu items – both in the main application and in the panel menus (the flyout). As well as remove them, you can assign a colour to certain items, meaning they are easy to navigate to for either you or someone with less experience who is working on a project with you. If you have hidden menu items and want

to see them again, you can hit Cmd/Ctrl and click on the menu, or hit Show All Menu Items, which appears at the bottom of the menu when you've hidden an item. Like shortcuts, you can save and load menu item sets – meaning you can recall certain menu layouts for certain jobs. This can be used in conjunction with the Workspace features to completely customise Photoshop to your day-to-day or project-specific needs. And of course it's easy to revert back to default if you need to.

Workspaces have been, for a few releases, the key to customising your Photoshop workflow. And they are so easy to set up that you have no excuse – if you're using Photoshop daily it's a must. To set up your own workspace, hide panels you don't use, remove menu items you don't need and essentially get Photoshop working the way you like it (for instance, do you like a long tool panel or the traditional double-column? Change this by double-clicking the top of the tools panel). Then simply go to Window>Workspace>New Workspace. Give it a relevant name and hit Save. It then appears in the Application bar at the top of the screen. Of course, Adobe supplies preset workspaces for 3D, painting, design and the like, but it's much better to have your own set-up. It's foolish not to, in fact. If you remove panels or add menu items back in as you're working, just go to the Workspace sub-menu and use the Reset command to get back to your custom workspace.

Another way to customise Photoshop is by using the Preset Manager in the Edit menu. When you open up Photoshop, there are a number of presets that are there by default – brushes, swatches, gradients, styles, patterns, contours, custom shapes and tools. By using the Preset Manager you can customise what appears, so if you have a series of swatches you use on a regular basis, or more likely a series of brushes, you can load them here, as well as saving sets to load in later.

Whatever way you decide to customise Photoshop, you should do exactly that: customise it. Make it your own app, fine-tuned to your way of working, and don't just accept the defaults, no matter how well you know the software. If you tune it into your way of thinking – which may take a while to set up – you will reap the rewards when it comes to workflow. And everyone needs more time.

10 hidden tricks to improve your workflow

The shortcut secrets that you never knew existed...

HIDE ONE PANEL

You probably know that hitting Tab will hide all panels and tools so that you can see your work without any distractions. But did you know that hitting Shift+Tab will just hide the panels on the right-hand side of the interface, leaving the Tool panel, Options bar and Application menu on screen?

⇧ + ⇥

BLENDING MODE SHORTCUTS

When you have a layer selected (as long as it's not the background), you can quickly shift through blending modes by holding down Shift and + or -.

⇧ + + or -

CREATE, MOVE, EDIT

It's annoying when you've used the Marquee tool to create a selection but it's not in the right place and needs to be a bit bigger or smaller. You could reselect, but by holding Space bar as you make your selection, you can drag the marquee around and then edit it when it is in the correct place.

QUICKLY CHANGE OPACITY OF A LAYER

To change the opacity of a layer very quickly, make sure you have the Move tool selected and then type a number – for instance, 4 for 40 per cent opacity, 5 for 50 per cent and so on. You can even type, for instance, 13 for 13 per cent if you need to be more specific.

SELECT TOP AND BOTTOM LAYERS

To quickly select the bottom layer in your document, hit Alt/Opt+< and to select the top layer Alt/Opt+>. To select all layers between your selected layer and the bottom layer hit Alt/Opt+Shift+< and all layers between your current and top layer Alt/Opt+Shift+>.

⌥ + > or <

⌥ + ⇧ + > or <

ACCESS HIDDEN MENU OPTIONS

In most dialogs, including Filter Gallery, Levels, Curves and so on, you can hit the Alt/Opt key to change the Cancel button to a Reset button. And in some cases, hitting the Ctrl/Cmd key will change the Cancel to a Default button. This is handy for reverting to predefined settings if you go wrong.

⌥ or ctrl

USE ZOOM WHEN IN LAYER EFFECTS

When applying layer effects, the Hand tool is selected by default. If you want to zoom in or out of your document whilst previewing an effect, simply hit the Alt/Opt key to zoom out or the Cmd/Ctrl key to zoom in.

⌥ or ⌘

QUICKLY TURN A PATH INTO A SELECTION

After drawing a path with the Pen tool, you can quickly turn it into a selection by hitting Ctrl/Cmd+Enter. This saves you a trip to the bottom of the Paths panel...

⌘ + ↵

FILL WITH BACKGROUND COLOUR

To fill a selection or your document with the current background colour, hit Alt/Opt+Delete (just Delete will fill with the foreground colour).

⌥ or ←

ADJUST OPACITY, FLOW AND BLENDING MODES ON BRUSHES

When using a painting tool, you can use the number keys to specify opacity – just like opacity of layers – by hitting 1 for 10 per cent, 2 for 20 per cent and so on. By adding Shift, you can do the same thing with flow, and by using Shift and + or - you can cycle through brush blending modes.

⇧ + + or -

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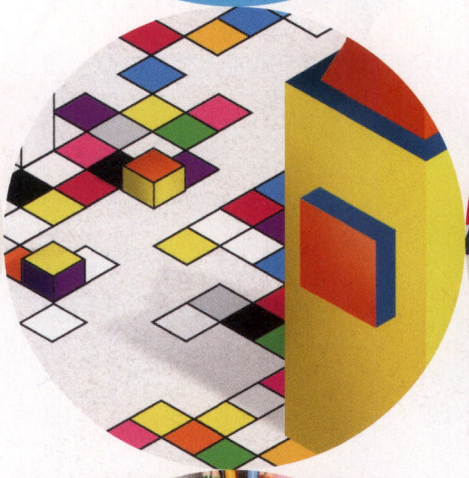
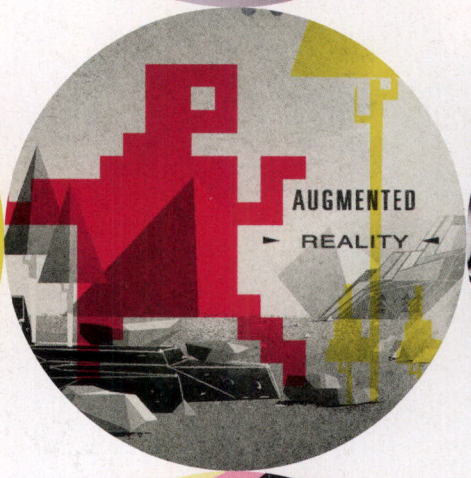
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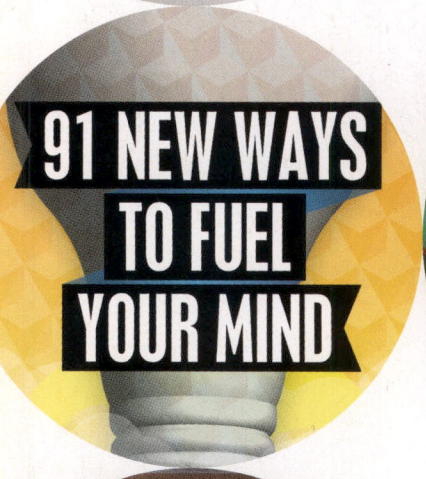
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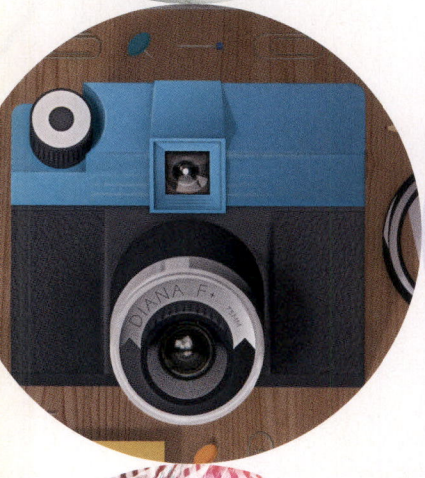

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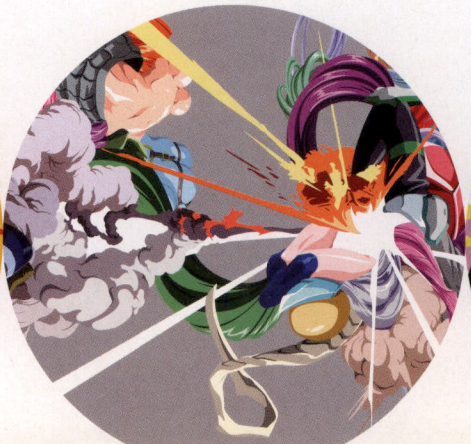

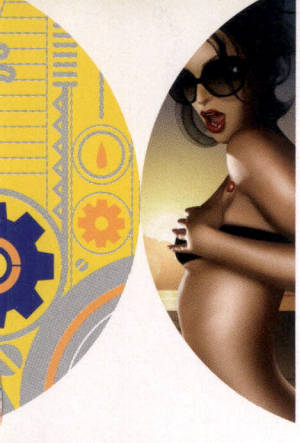

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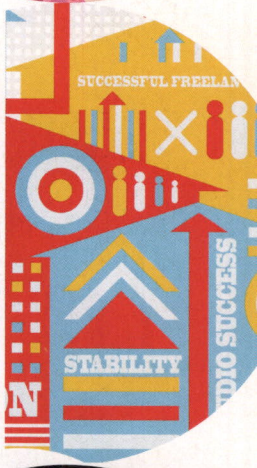
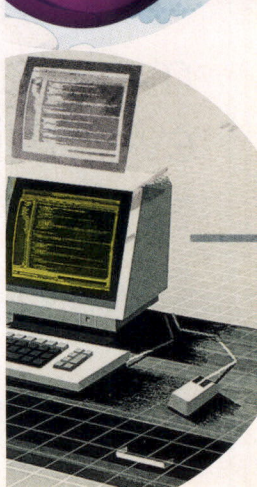
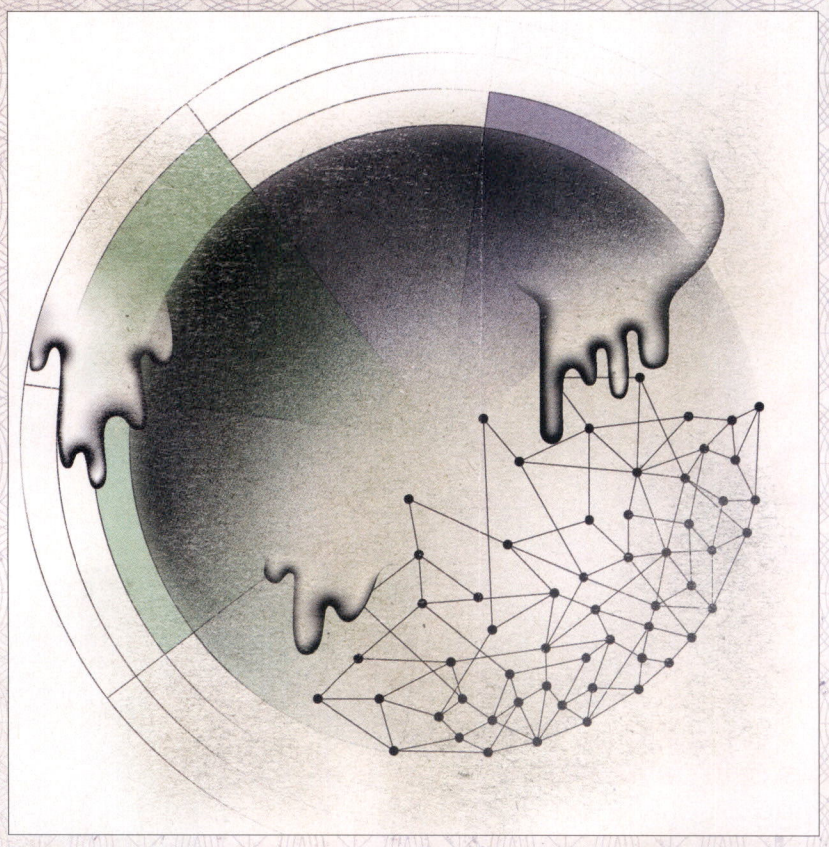






RETOUCHING TOP 50

If you commit just 50 retouching facts to memory, make sure it's these, covering everything from RAW conversion to selective sharpening

1 What to achieve from RAW conversion

Retouching an image generally begins with the RAW file, as this contains all of the information that the camera's sensor recorded. Using a RAW convertor such as Adobe Camera Raw, the first and most important step is to pack as much of that information as possible inside the histogram, because anything outside it will be clipped when you convert the file to a bitmap. The Auto setting usually does a good job of this, and can act as a good starting point for your retouching.

2 Exposure v brightness

The Exposure setting controls the point at which the highlights in an image clip, with mid-tones and shadows pulled along behind them. This setting can often be left alone after the first step. Once the RAW data is optimally presented and contained inside the histogram – providing as much shadow and highlight detail as possible for you to work with – the Brightness control can then take the lead, as this controls image brightness by shifting the mid-tones.

3 Clarity v contrast

The Clarity setting is a unique form of contrast adjustment. Unlike Contrast, which works globally over an image, the Clarity control acts as a form of local contrast – enhancing the dynamics between the highlight details and the shadow details. To achieve a 'painterly' look, just lower the Contrast to reduce all the large dynamics between light and dark, and then bring them back using Clarity. This will create a flatter and more artificially balanced-looking image.

4 Colour contrast and split toning

To create a stylised look, it's very popular in photography and cinematography circles to use a colour contrast. This often means adding a cold colour tint to the shadows in an image and adding a warm tint to that image's highlights – or vice versa – and these are commonly complementary colours (an example being the classic 'teal and orange' look). One of the best ways to achieve this is with the Split Toning section and the excellent Kuler colour wheel: http://kuler.adobe.com/

5 Sharpening

Many retouchers choose not to use any sharpening in the RAW conversion. Sharpening is easy to apply later, but difficult to undo. Because much of the work involved in retouching tends to be smoothing skin and cleaning up unnecessary details, sharpening early on can actually make your job more intricate and difficult, as any tiny details and imperfections will be further sharpened and enhanced.

6 IDENTIFY PROBLEMS

The first step in actually retouching an image should always be to study it – ideally at about the size and scale it's going to be used – and identify everything that isn't important. It's often said if it's not adding to the image, it's taking away from it. These could be anything from stray hairs to regions where there's too much light. Retouching is really about simplifying an image so that it conveys what it needs to as elegantly as possible.

7 Don't go zoom crazy

There's a tendency for retouchers to spend a lot of time zoomed very close in on an image. When working on an image for any length of time, this can very much lead to a case of not being able to see the wood for the trees, as we focus on almost invisible imperfections and become slightly oblivious to the bigger picture. Try to have a default zoom level that you return to often, and zoom in and out frequently.

8 Don't damage skin texture

If you want to keep an image looking natural, it's essential to get skin texture right. Some retouching plug-ins and tutorials involve applying blur or painting directly onto skin parts in the photo, but this is rarely a good idea unless you're going for a special effect. Skin texture can be protected by either cleaning it up very intricately with tools such as the Healing brush and pixel-level Dodge and Burn, or with frequency separation techniques such as the Inverted High-Pass technique.

9 Fix skin manually before smoothing

Most automatic skin smoothing processes will have the tendency to reduce detail definition and tonal depth, resulting in soft or overly smoothed looking images. While time constraints might not afford endless hours spent cleaning up skin manually with tools like the Healing brush and Clone stamp, fixing the noticeable problems with these first generally means we won't need to do as much when we apply a smoothing process later.

10 Inverted High-Pass

The Inverted High-Pass technique is a way to selectively erase details in an image within a defined detail range. When used to clean up skin, it's commonly known as 'degrunging', as between the smooth contours of the skin and the fine pore details there's a range of rougher detail which can often be safely removed. IHP can also be used to smooth out strong or sharp highlight and shadow contours on skin, hair and clothing.

11 INVERTED HIGH-PASS: HOW TO...

To perform the Inverted High-Pass technique, duplicate your image and invert it. Set its blending mode to Linear Light and Opacity to 50%. Apply a High-Pass filter and find a radius which just gives you smooth blurry skin in the main window. Now apply Gaussian blur, increasing the radius until you've brought back just enough fine detail on the skin surface. Mask and hide this layer and then paint back on where required, avoiding any edges.

12 Protect skin texture

Using techniques like frequency separation and the High-Pass filter, we can retain fine skin detail while cleaning up inconsistencies below it. But when concentrating on skin texture, avoid the common temptation to enhance or overly sharpen it. Pores should be retained, but should be barely visible. Don't make skin look rough. It's only when pores are unnaturally absent we notice something is wrong.

13 Soft Light Dodge and Burn

While Photoshop includes its own Dodge and Burn tools for working directly on an image, Dodging and Burning onto a separate layer is nondestructive and can offer more flexibility. Go to the Layers menu and select Create New Layer. In the Blending options select Soft Light or Overlay, and tick Fill with 50% Grey. You can now paint on this layer with a black or white paint brush to brighten or darken the image underneath.

14 Curves Dodge and Burn

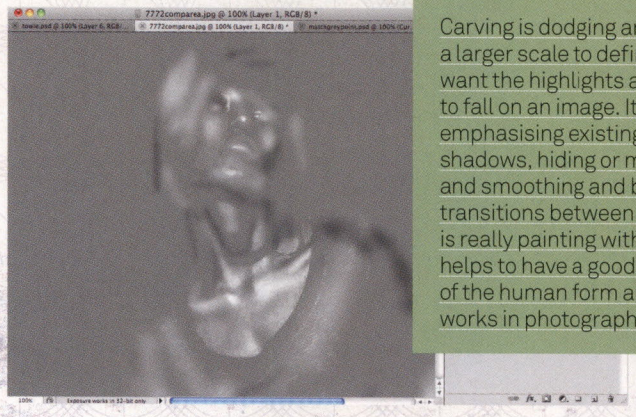
One problem with using Dodge and Burn tools is that it can cause characteristic colour and saturation shifts. Sometimes this can add a glossy and loud look, but for a more controllable version, create two Curves Adjustment Layers and bring Brightness up on one and down on the other. Add a Hide All mask to each curves layer and you can now bring either the dark or light effect in simply by painting on the mask layer with a white brush.

15 Pixel-level Dodge and Burn

One of the most transparent, but often most time-consuming, ways to achieve smooth and even skin is with pixel-level Dodge and Burn. The idea is that any blemishes or imperfections will tend to have tiny highlights and shadows. By zooming in very close and dodging and burning with a very small brush, you can even out these areas, lightening the shadows and darkening the highlights until the blemishes are nearly invisible.

16 CARVING

Carving is dodging and burning on a larger scale to define where you want the highlights and shadows to fall on an image. It can involve emphasising existing highlights and shadows, hiding or modifying them, and smoothing and blending the transitions between them. Carving is really painting with light, so it helps to have a good understanding of the human form and the way light works in photographs and paintings.



17 Check for inconsistencies

When dodging and burning, whether on a large or small scale, it can be easy to end up with uneven areas. To check for these, we can temporarily create a black-and-white Adjustment Layer to make tonal differences easier to discern, and then add a Curves layer with an exaggerated S-curve to give us very high contrast. Now rough areas and inconsistencies should stand out and be easier to correct; just remember to make adjustments on the layers below.

18 Saturation brush

It can be common when dodging and burning to find that you have areas where the effect's increased or decreased the colour saturation. To fix these, you can make a Saturation brush by creating a Hue/Saturation layer and taking the saturation all the way up or down. Mask it to hide all and then paint the effect in. This can be done nondestructively. Photoshop also has its own Saturation brush, which you can apply directly to an image using the Sponge tool.

19 Skin colour inconsistencies

Natural differences in hue across areas of skin aren't uncommon but can be distracting in an image. A simple way to correct areas where there's a noticeable hue shift is to first draw around the area with the Lasso tool – selecting a feather of perhaps 10 pixels. Then, with this area selected, create a Curves Adjustment Layer and adjust the mid-points on the Red, Green and Blue channels to balance the colours by eye.

20 Even out skin tones with Gradient Maps

For very even skin colour, you can use a Gradient Map Adjustment Layer. With the Gradient Map layer (and not its mask) selected, take Opacity down to 0% and edit the gradient colours. Sample a highlight, mid-tone and shadow area of skin from your image to build the new gradient. Now change its blending mode to Colour and take Opacity up. Mask and hide this layer, and then paint it back in on skin areas only.

21 2-strip Technicolor

The 2-strip Technicolor process simplifies colours by constructing a three-colour image from two colour channels. Create a Channel Mixer layer and, on the Blue channel, take blue down to 0% and green up to 100%. Add a Hue/Saturation layer and adjust the Hue until the skin looks natural. This can be left as is, or masked so that the effect is only applied to skin. Alternatively you can go to the Green channel and take green to 0% and blue to 100%.

22 The cross-processed look

Cross-processing emulates the effect of developing film in the wrong type of solution. While there are many variations, the simple effect is adding a blue hue to the shadows and a yellow hue to the highlights. With a Curves layer, select the Blue channel and bring the bottom-left point up about a quarter of the way, and the top-right point down by about the same. You can use an inverted S-curve otherwise to protect the black and white points.

23 Colour balancing

Adjusting the mid-points on the Red, Green and Blue channels in a Curves layer is a simple way to balance colour in an image, and offers further flexibility to adjust highlights and shadows in more depth. It's useful to remember that bringing down reds shifts colours towards cyan, bringing down greens shifts them towards magenta, and bringing down blues shifts them towards yellow.

24 SATURATION CURVES

Increasing contrast tends to increase colour saturation, but only in the tonal region where contrast's been raised – usually just the mid-tones. To selectively saturate or desaturate different tonal regions, create a Curves layer and set its blending mode to Colour. The steepness or flatness of the RGB curve now affects colour saturation. An inverted S-curve desaturates mid-tones while increasing saturation in highlights and shadows.

25 Changing eye colour

One of the simplest ways to selectively change the colour of an image element is with a Hue/Saturation layer and a mask. Select the irises of the eyes and create a Hue/Saturation layer. Now you can simply shift the Hue point to change the hue of that element, and use the Saturation and Lightness controls to adjust the effect if it's too strong or the colour looks unnatural.

26 Bringing out eye detail

It's usually desirable that the eyes are a well balanced focal point in an image, and don't look dull or flat. Most eye work can be done with Dodge and Burn – cleaning up the whites of the eyes and emphasising the edges and details of the irises. It's also usually important that the eyes are sharp and in focus; this might mean applying a degree of additional sharpening selectively to those areas.

27 Avoid 'cartoon eyes'

Real eyes are three-dimensional objects with natural shading and gradients. When working on eyes, less is generally more. 'Cartoon eyes' is what happens when retouchers go too far: eye whites become unnaturally flat and white, and irises start to look painted on. Overly defined, sharpened or drawn-on eyelashes can add to this unnatural effect. While eyes should look clean and defined, they shouldn't look unnaturally bright and shouldn't usually dominate an image.

28 How does the eye scan the picture?

After correcting flaws you spotted when you first studied the image, the next thing to do is to examine where your eyes are naturally drawn around it. It should feel comfortable to look at, and your eyes should naturally rest somewhere where the whole image can be taken in and explored. Too much detail in skin or hair texture can create a noisy and disconcerting effect, constantly drawing attention away from the features.

29 Equalising with the Black & White filter

Photoshop's Black & White Adjustment Layer enables you to control how much each separate colour contributes to the tone and luminosity of an image. This can be very useful for controlling where the tone is in a colour image, too. If you set the Black & White layer's blending mode to Luminosity it becomes a sort of colour equaliser, enabling you to make a blue sky brighter or darker, or to darken coloured background elements to make a subject stand out.

30 Black-and-white images need strong tonality

If we simply desaturate a portrait, we tend to get fairly drab skin tones which go from a light mid-tone to a slightly darker mid-tone. Black and white film is often good at capturing very dynamic and descriptive skin tones. To emulate this, it's usually important that we shoot and process digital black-and-white images in colour. Then we can use mainly the Red and Yellow sliders in Photoshop's Black & White filter to get a skin's tonal range where we want it.

31 ADDING TONALITY TO SKIN WITH CURVES

The Curves layer offers a flexible way to control tonality in skin. Selecting the finger icon to the left of the drop-down, we can click on different regions of our image and have our Curves layer add control points corresponding to each region's tone. To control tonality in skin, we can click a bright highlight, a bright mid-tone, a darker mid-tone and a shadow in our image, and then move those four points on our Curve up or down to flexibly shape the skin's tone.

32 Adding tonality with Gradient Maps

Gradient Maps can be useful in helping us enhance and control the tonality of an image. Create a Gradient Map Adjustment Layer and set its blending mode to Luminosity. Now select a simple black-to-white gradient, and see how it enhances the tonal range and contrast of an image. We can mix this effect in and out with the Opacity slider, and we can control the tones further by editing the gradient and adding extra colour stops. →

33 Clean Adjustment Layers for blending

Creating a copy of an image on a new layer then changing its blending mode and opacity can give us a wide variety of effects. A more flexible and less memory-hungry way to do this is simply to use a blank Adjustment Layer – as it will act as essentially the same thing. For example, create a Curves layer and set its blending mode to Overlay. We've now got a much more colourful and contrasting image, and we can dial this effect in and out.

34 TINTING WITH GRADIENT MAPS

Many 'black-and-white' images aren't actually black-and-white. It's common to tint a monochrome image – for example with brown/sepia for a warm or antique look. Gradient Maps' more adventurous colour presets can be very effective for tinting black and white images. Starting with a black-and-white image and Gradient Map layer, select the Yellow, Purple, Orange, Blue gradient preset and change the layer's blending mode to Soft Light. Set Opacity to around 10-20%.

35 Layers and nondestructive editing

When we paint, stretch or dodge and burn directly on an image layer, we change its data. This is 'destructive editing'. At a certain point, the data we've lost becomes irretrievable. Using layers for most of our edits – for example dodging and burning on a Soft Light layer and using Clone Stamp on its own layer – is nondestructive. These changes can all be modified and turned on and off, with the source image unaltered below.

36 Flattening and destructive editing

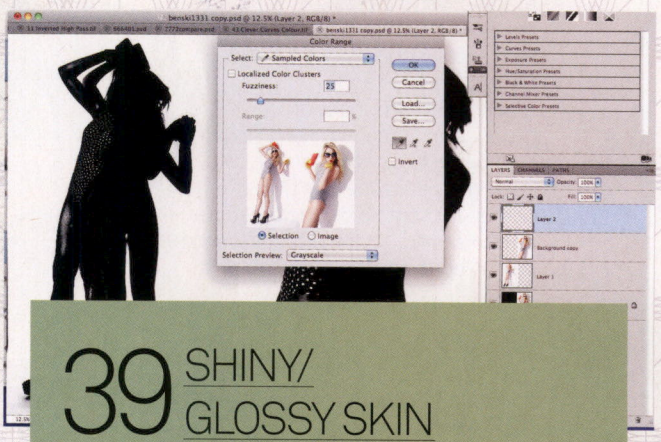
While nondestructive editing is often the ideal – enabling us to review changes and make alterations on client request – flattening our layers and applying edits directly is sometimes necessary. For example, if you've manually smoothed skin with Dodge and Burn, you may want to apply additional smoothing with a frequency separation technique. In these situations, Cmd/Ctrl+Alt/Opt+Shift+E will flatten all your layers and put them in a new top layer.

37 Impossibly smooth skin

Heavily smoothing skin with any one method generally takes you towards an unnatural look. As with many things in retouching, the best approach is often to apply many subtle changes for a cumulative effect. You might begin fixing tiny flaws with the Healing Brush and Dodge and Burn; then use the Inverted High-Pass technique to help blend the results; then perhaps use Imagenomic's Portraiture plug-in subtly to smooth further.

38 Masks when smoothing

There are many techniques and plug-ins to smooth skin and hair. Some images may require the use of more than one. But it's always important to protect details, edges and defined shadow and highlight contours, as these also get smoothed, and the result of that can look unnatural and 'retouched' – giving things a plastic or blurred appearance. All of these techniques should be masked or painted in carefully to protect important image details.



39 SHINY/ GLOSSY SKIN

Shiny skin will usually have strong, sharp specular highlights. Creating these is generally done after everything has been smoothed and carved with Dodge and Burn. On a new layer, select white as your foreground colour then go to the Select menu and select Colour Range... It should have Sampled Colours selected. Drag the Fuzziness slider to a point where subtle highlights are visible in the Selection. OK this, and fill that selection in white.

40 Liquify

Liquify's usually best employed as either a first or last step in the retouching process. As it's destructive, there's less point having it as a mid-way step in a layered and nondestructive retouching workflow. Liquify's often best approached with many subtle changes, using a fairly small brush. The most important thing, however, is to have a good sense of human anatomy and form. It can help to study classical art, and perhaps occasionally reference 'golden ratio' masks.

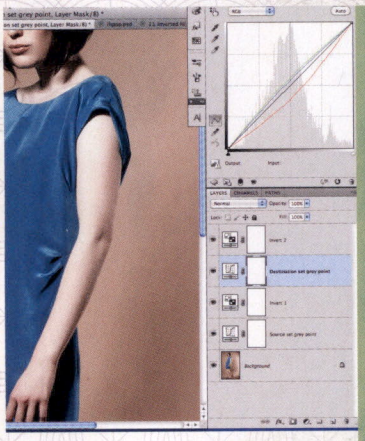
41 Desaturating skin

The Hue/Saturation Adjustment Layer has a drop-down menu which lets you selectively saturate or desaturate within certain colour ranges. It doesn't

have an orange, however, and this is usually the most useful colour range for skin. To create one, select an existing colour from the menu, such as red, and just shift the range selection across to orange. It's usually best to narrow it quite a bit too, so you're not desaturating yellow and red hues too much.

42 Colour sampling

Photoshop's Colour Sampler tool acts like the standard Eyedropper, but will display the real-time colour values of multiple points simultaneously in the Info window. This makes it very useful for matching skin tones between two images, or between different regions of the same image. Thinking of one value as a source and the other as a destination, it's usually best to start with matching a mid-tone from each, and works best when employed along with Curves.



43 GREY POINT COLOUR MATCHING

If you want to match the skin colour of one image to another quickly, open each image and create a Curves layer. Use the grey point Eyedropper on a neutral area of skin to create and save a Curves preset for each. Go to your source image, with the Curves layer still active, and add an Invert layer. Then add a Curves layer with the saved curve from the destination image, then add another Invert layer. You've turned the source skin grey, then done the inverse of what turned the destination grey.

44 Adding colour tints to shadows

Although Photoshop enables you to create gradient presets which include transparency, unfortunately the transparency doesn't work with the Gradient Map tool. To create the effect of purple blending to transparency, create a purple Solid Colour layer and set it to Colour Blending. With the Blend-If sliders on the underlying layer, break the right point apart by dragging it while holding Alt/Opt, and take it all the way to the left, for a purple which fades out as you go from shadows to highlights.

45 Stray hairs on the face

Stray hairs are usually unnecessary and often distracting image elements. The best way to clean them up is usually with the Clone Stamp tool, sampling a section of nearby skin. This can be done nondestructively, on a new layer, with the Clone Stamp set to sample current and below layers. Sometimes, however, this can be complicated by nearby details or tone differences, and in these cases occasionally the Spot Healing tool will do an excellent job applied directly.

46 Shrinking images smoothly

Photoshop's own Bicubic image resampling can sometimes produce artefacts – for example the moiré effect. A fix for smooth resizing is to blur the image to blend the transitions between pixels, before resizing and further sharpening. If we're going to reduce the image size by a factor of five, apply a Gaussian blur of 0.3 pixels x 5 (in this case that gives us 1.5 pixels) before resizing with Bicubic (smooth gradients) in Image Size as normal.

47 High-pass sharpening

High-Pass sharpening is a flexible, nondestructive way to sharpen an image. It's a basic frequency separation technique, enabling you to extract high spatial frequencies from an image and mix them in further. Create a copy of your image on a new layer; set its blending mode to Linear Light and its opacity to 50%. Now apply a High-Pass filter. Values around 0.3-0.8 should give you a typical sharpening effect which can be toned down with Opacity.

48 Subtle sharpening

Sharpening's often best done in multiple, small increments, as the look of obviously or over-sharpened images is usually undesirable. A high-resolution image for print may require sharpening with a fairly large radius – perhaps in the region of 0.8-5 pixels – to bring out details at the level it will mostly be viewed at, and also sharpening with a smaller radius – around 0.3-0.8 pixels – for fine, up close detail.

49 Protecting colour when sharpening

Sharpening can sometimes produce tiny, unwanted colour artefacts where shadows or highlights have been enhanced. To protect colour detail when using Photoshop's sharpening filters, flatten your image to a new layer using Cmd/Ctrl+Alt/Opt+Shift+E, then set it to Luminosity blending. Sharpening this layer will sharpen all the highlights and shadows as normal, but allow the unsharpened colour information from the layer underneath to come through.

50 Selective sharpening

Sharpening can be used selectively to bring out different levels of detail in different areas. Smooth skin may be sharpened with a small radius to only bring out fine details, while eyes and lips may require a larger radius and perhaps stronger sharpening to bring out larger details. This is done by sharpening the image multiple times with different strengths and radiuses, and unmasking those layers only where the sharpening's required.

Photoshop CS2 or later

Retouch images with frequency separation

Ben Secret explains how to achieve smooth yet sharp images, without losing realism

One of the black arts of photographic retouching is how to achieve the impossibly smooth yet sharply rendered skin, textures and fabrics seen in fashion and beauty images. Photoshop has its own high-quality smoothing and sharpening filters, but the two processes tend to be somewhat contradictory.

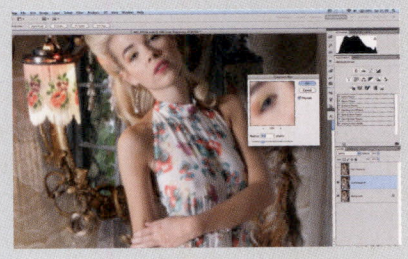
In this tutorial I'll walk you through how I retouch an image from start to finish, using a technique that enables you to selectively process not only different areas of an image, but also different detail levels. Frequency separation involves creating a high-detail (high spatial frequency) layer and a low detail layer from a source image – a particularly clever method of doing this was popularised by Sean Baker, a Maryland-based photographer and retoucher. Using this technique enables you to smooth and rework rough and fine details independently, and opens up some very high-quality and non-destructive methods with which to sharpen your images.

Ben Secret
London-based Ben is a designer and retoucher. He out started young enough to remember making computer graphics with graph paper and binary, and is inspired by Swedish cinema, the 1950s, early science fiction and futurism.
www.bensecret.com

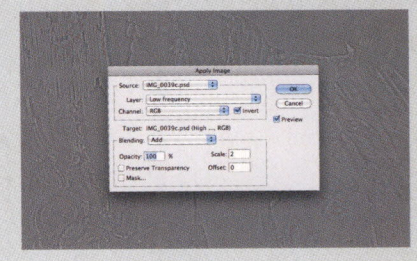
Time needed
1-2 hours

Skills
- Learn a non-destructive retouching workflow
- Separate an image by spatial frequencies
- Re-contour shadows and highlights

01 In Photoshop, the first step is to ensure you're in 16-bit mode and, using your own photo, create two duplicate layers of your source image. Name the middle layer 'low frequency' and the top 'high frequency'. The bottom is your untouched image, which you may want to reference later.



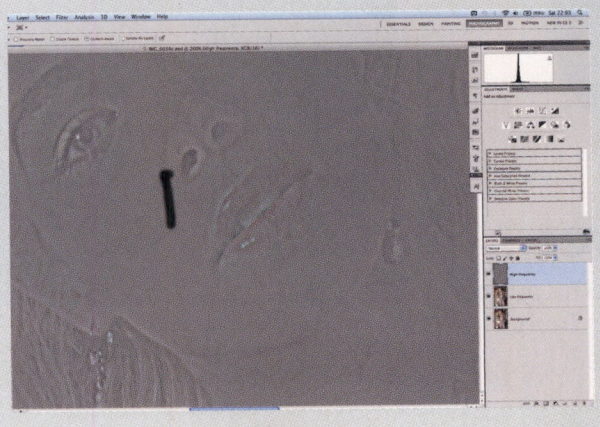
02 Select the low frequency layer. To create your frequency separated image, you need to remove all the detail from this layer. Select Gaussian Blur. The Radius setting determines the crossover point between your high- and low-detail layers. This should be the point at which very fine details like skin pores and eyelashes blur. Experiment until you're happy.



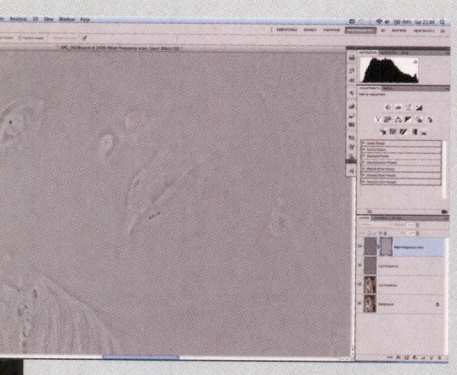
03 Now select the high frequency layer, and go to Image>Apply Image. For Layer, select Low frequency from the drop-down menu, and for Blending, select Add (but not Linear Dodge Add). Set Scale to 2, Offset to 0, tick the Invert box and hit OK. All being well, you should now have a faint, fine detail layer. Change the layer's blending mode to Linear Light.

04 Your original image is now reconstructed with no loss in quality. Select the low frequency layer and apply a Surface blur (Filter>Blur>Surface Blur). You want enough blur to smooth out inconsistencies in skin tone, without smudging highlights and shadows. I'm using Radius: 11, and Threshold: 10.

05 With your high frequency layer neatly separated, smoothing and painting on your image becomes much less destructive. The light here has cast some hard shadows on the model's face. Staying on the low frequency layer, use the Eyedropper and a soft brush with Flow set to 1% to smooth the contours of the face.

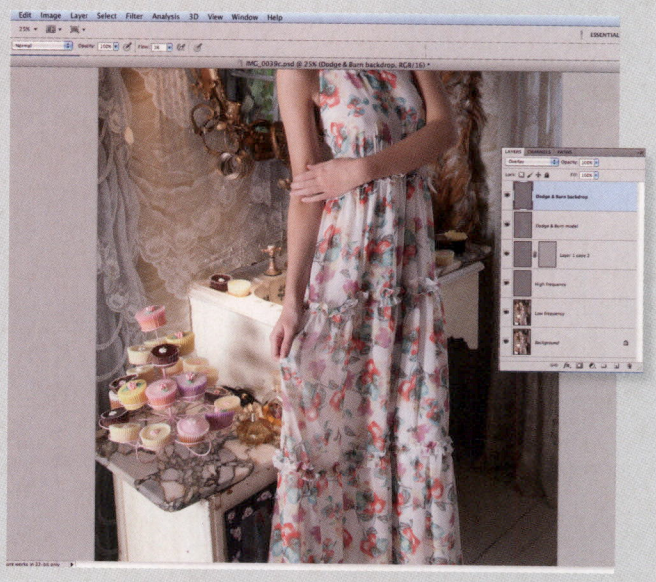


06 Select the high frequency layer and clean up any blemishes, wrinkles and stray hairs. One of my favourite tools is the Spot Healing brush. Without the low frequencies, this tool becomes even more effective, enabling you to zap unwanted details without then creating patchy colour inconsistencies. →

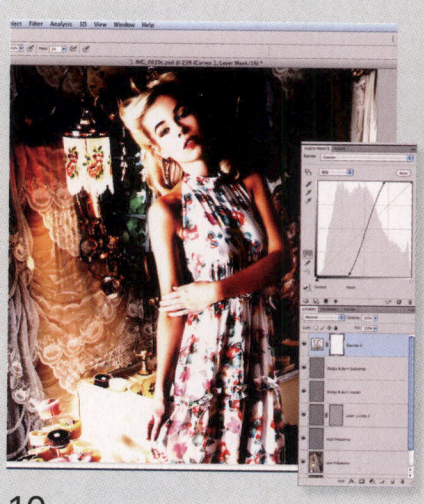


07 This technique also enables you to apply some very high-quality sharpening effects. Duplicate the high frequency layer, add a mask to the new layer, copy and paste the high frequency image into its own mask (Alt/Opt+click the Mask window in the Layers palette), and invert it (Ctrl/Cmd+I).

08 Next create a Dodge and Burn layer to bring out highlights and shadows where you want them. Go to Layer>New> Layer, set the mode to Overlay, and tick 'Fill with Overlay-neutral colour (50% gray)'. Paint on this layer with a soft black or white brush set to 1% Flow. (The image here demonstrates how this layer looks with the blending mode set to Normal.)

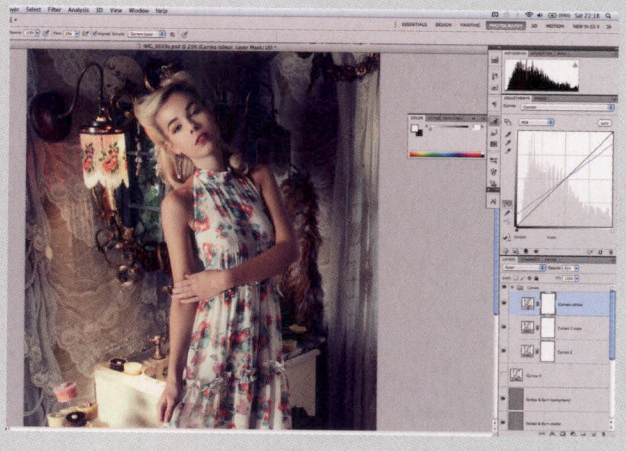


09 Dodge and Burn can be used with large brushes to create dramatic highlights and shadows. I create another Dodge and Burn layer for the background, and add some light to the image elements I want to bring out, such as the cupcakes. I also create a little more glow from the light, and darken the shadows around the model.



10 After painting, dodging and burning the skin, it's not unusual to find small patchy areas and inconsistencies in your brush work. To check for this, create a Curves Adjustment Layer with a very exaggerated S-curve: small tonal inconsistencies will be blown up for easier correction.

11 Make your exaggerated curves layer invisible, and create another Curves Adjustment Layer to pull the shadows down a bit. Go to the Blue channel and add some blue in the shadows. When I'm happy with the outcome, I duplicate this layer so I can mix it in further, without having to change anything.



12 Now create another Curves Adjustment Layer to tweak the colour. For images that need heavy colour correction, this would be one of the first steps in the retouching process. However, here it's more for a creative effect. Select the Blue channel and rotate the gradient clockwise by about 10 degrees.

Visual CV

In pictures: a guide to the career and work of our technique writers

Ben Secret

The designer and retoucher recalls five of his favourite creative projects...

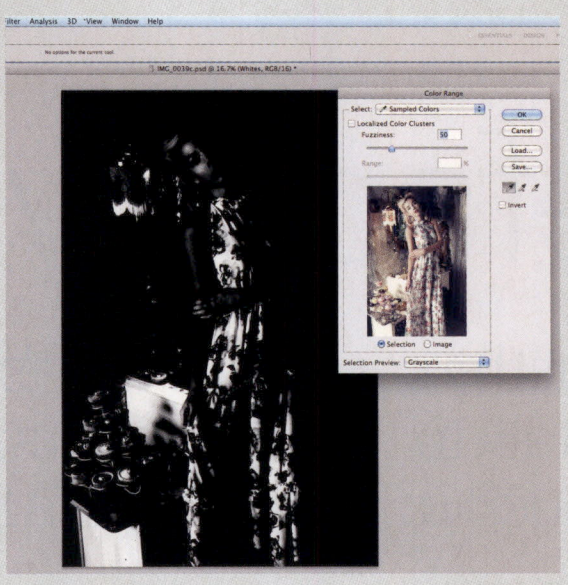
Chanel Rene – November 2010
This image was retouched by Secret for beauty and fashion photographer Chanel Rene.

Ruth Rose – November 2010
Fashion photographer Ruth Rose commissioned Secret to retouch and edit these pieces.

13 Next add a Hue/Saturation layer and a Brightness/Contrast layer, just to balance the image at this stage. Take Saturation down to -27. When desaturating an image, I set the blending mode of the Adjustment Layer to Colour so that I don't lose any contrast.

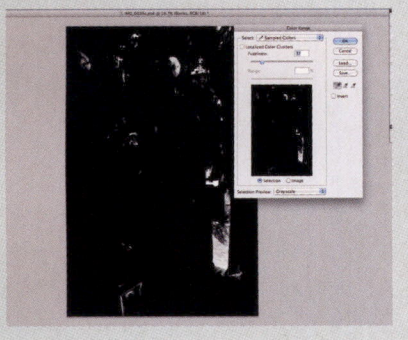
Always zoom

It's easy to lose touch with the big picture when you're focusing so much on the details. I try to go not more than 30 seconds without zooming in and out, tilting my head and squinting my eyes.

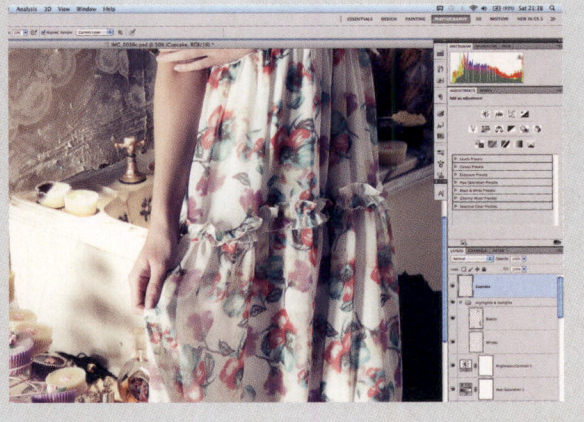


14 To add shine and specularity to the highlights, create a new layer and, with white selected as your foreground colour, go to Select>Colour Range. Take Fuzziness up to a point where you can see only the brightest highlights, hit OK, then fill the selected area with white.

15 For this image I want a softer, dream-like quality. The white areas we just filled might be quite grainy, so with this layer selected, add a Gaussian blur with a radius of about 5 pixels. This will smooth the white highlights on the skin and add a subtle glow.



16 I also want to add some depth to the darker areas of the image, to make sure the focus is on the model and the cupcakes. To do this, simply do the same thing again on a new layer, this time with black selected as your foreground colour, and fill the area in black. Mix this in at a low opacity, somewhere around 10-20%.



17 Take a look at the image now: one thing dragging the eye away from the model's face and towards the centre is the dark cupcake on the sink. To correct this, I create a new layer, set the Clone Stamp tool to Sample: All Layers in the Tool Options bar, and replace the dark cupcake with the yellow one next to it.

18 When retouching, some creatives like to liquify an image as the first step, but I prefer to leave it until last as this is more of a destructive edit. I'll usually save the image as a Photoshop file, then flatten it for this step. Here I make the nose straighter and reduce the stretch from the earring on the earlobe.

Vantaged/Stone Island – July 2010
Secret posed for and photographed this image for Vantaged/Stone Island.

Motel Rocks – January 2011
British fashion retailer Motel Rocks asked Secret to retouch this shoot.

Laura Taylor – January 2011
Secret photographed and edited this piece for designer Laura Taylor.

Beefactory

That myth about the camera lying? It's well and truly dead. We talk to two of its killers: Beefactory, the retouching muscles from Brussels

Tim Vin
The local half of Beefactory, Tim was born and lives in Brussels and is the one with the artistic training. He studied graphic arts at Instituts Saint-Luc Bruxelles and can remember his first go on *Deluxe Paint* on the Amiga.

Frédéric Labeye
Hailing from Liege, Fred came to Brussels to study photography at the Institut de Radioélectricité et de Cinématographie (INRACI). His first taste of retouching came in the form of drawing directly onto film negatives. Remember film?
www.beefactory.be

Retouching – it's the less glamorous but entirely essential side of Photoshop. Everyone uses Photoshop to retouch a photograph at some point, and it's rare that you'll ever see a photograph in print that hasn't had some form of contact with Photoshop, from simple level adjustment to the sort of full-on wizardry you see on glossy magazine covers. And there's the thing: the very name, Photoshop, has become verbed into the de facto linguistic shorthand for retouching an image on a computer. Art editors, designers, pre-press studios – they all have to do a bit of Photoshopping every now and then, as a part of their job. Sites like Worth1000 and B3ta are full of examples of people doing a bit of Photoshopping; mucking about with images – it's a hobby, a bit of fun. Not *that* many people manage to make a career solely out of retouching.

Beefactory – Tim Vin and Frédéric Labeye – are one of the exceptions. Based in Brussels, they proudly describe themselves as a retouching studio – nothing more, nothing less – and their work covers the whole retouching gamut, from surrealistic photographic tableaux in which nothing is as it should be, through to photographs where you'd be hard pushed to tell that anything had been done to them at all. "Sometimes," says Vin, "we're happiest when you can't see that we've worked on a picture."

Educated in graphic design and photography respectively, Vin and Labeye met 10 years ago while working at a small photography studio. "That's where we started specialising as retouchers," recalls Labeye. "It's where we really learned our profession, because there was no school focusing particularly on retouching as a discipline." For a while they both did odds and ends of graphic design: "Like a lot of people, we knocked out logos for friends in Photoshop, we did wedding and concert photography to pay the rent," says Vin.

When they got together to form Beefactory – "We decided to launch our own workshop and try to be different by working in a good mood," remembers Vin – it was a matter of starting small and building the business gradually. They got →

01 "So simple, so pure, so graphic," says Vin of this piece for **Antwerp Haven**. "We love this; we knew straight away it would be a great image."

Pro software skills: Photoshop

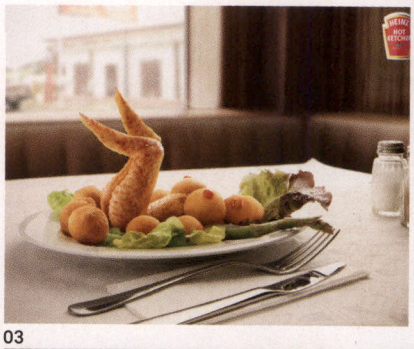
02 This topical piece for Belgian energy supplier **Luminus** had to be created from scratch in just 24 hours, including photography

03 Shot for a campaign for **Heinz**'s Hot Ketchup, Beefactory are particularly keen on this image because of its warm atmosphere

04 "We worked for weeks on this image," says Labeye of this piece for fashion chain **J&Joy**, "always trying to add little things. None of it is real."

05 Another piece for **Luminus**. "Changing the size of things is hard," says Vin. "Perspectives are difficult to keep; it has to be perfectly shot. It was."

02



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→ in contact with photographers that they'd met at college and offered their services, they did unpaid work for friends in the evenings, "and during the day we'd do things like pack shots, trying to earn money to pay for the coffee," says Labeye. "And gradually we started getting a good reputation, becoming trusted by the agencies. We've always tried to do our best, and now we work with a lot of people from all around the world."

Over the years Beefactory has built up an impressive list of clients, including agencies such as Saatchi & Saatchi and Wieden+Kennedy, and produced work for brands such as Levi's, Volkswagen and Smart, as well as working with a whole lot of photographers along the way. "We often work with an architectural photographer," says Labeye. "One of our best sessions was the Calatrava constructions in Valencia; for us it's great to show architecture as a creative picture, not just a representation of reality."

Retouching might be seen as the poor cousin of design, but for Beefactory it's every bit as serious and involved, with all the ups and downs of dealing with clients and managing expectations that any designer will be familiar with. Vin points out, "Clients can often be the hardest obstacles; clients who just want an expanse of green grass and a beautiful blue sky, whereas we see our job as trying to reach something beautiful, sometimes different in colour. But we understand that the client has paid a lot for [their] pictures, so we always need to find a compromise between our creative ideals and the realities of the job."

Depending on the client and the budget, they might find themselves presented with some stock photography to work on, or on a good day they'll be contacted before any shots have even been taken, and will get a chance to talk to the photographer and advise on any technical details that'll help them come up with a final image that makes everyone happy.

And when it comes to the nitty gritty of retouching, it's all about Photoshop. The Beefactory duo couldn't live without the Healing brush, but surprisingly they don't use any →

06 "Done by super nice young photographers with super nice young art directors!" Beefactory enjoyed making this ad for **Ghent University**

Pro software skills: Photoshop

07 Beefactory worked with photographer Frieke Janssens on this **TMF** ad. "She has this whole super creative outlook," says Vin

08 Don't have nightmares; this person doesn't really exist. "It's a **research piece**," says Labeye, "a composition based on textures."

09 More work for **TMF** with Frieke Janssens. "It's a lot of fun to mix comp with real things to get a strange result," says Labeye

10 It's not all surreal compositions, as demonstrated by this retouching job for photographer **Pierre Pironet**

07

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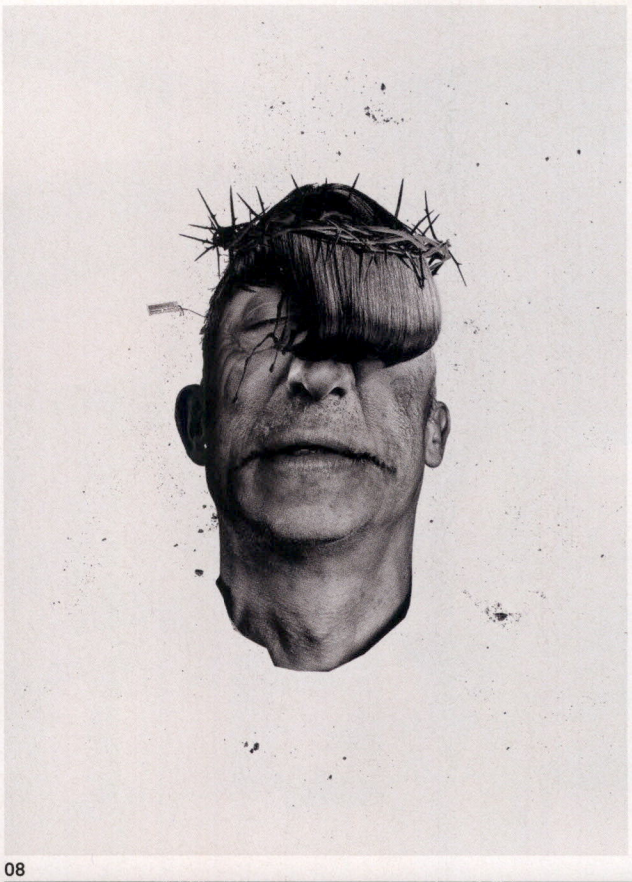

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→ special plug-ins, preferring instead to add any extra details – smoke, skies, textures – that they might need by photographing them themselves and pasting them in. And while they have different backgrounds – Vin in design and Labeye in photography – and different sensibilities, they work the same way and share the work between them. "So it's easy for one of us to finish the other's job," says Labeye. "We often work together on the same picture; it's better for a picture to have different points of view."

With demand for retouching services increasing, so has Beefactory's workload increased. "The world has changed," reflects Vin. "Your clients' kids know Photoshop, and so [your clients] know that there are lots of changes that we can make to pictures."

Isn't general familiarity with Photoshop a double-edged sword, though? Don't they worry about being put out of work as Photoshop offers ever more powerful features that enable anyone to get into the retouching business? "Absolutely not," says Labeye. "Tools like Photoshop's Content Aware functions work well for smaller pictures, but we often work with huge DPI images from big camera files, and that's where the automated functions fall short."

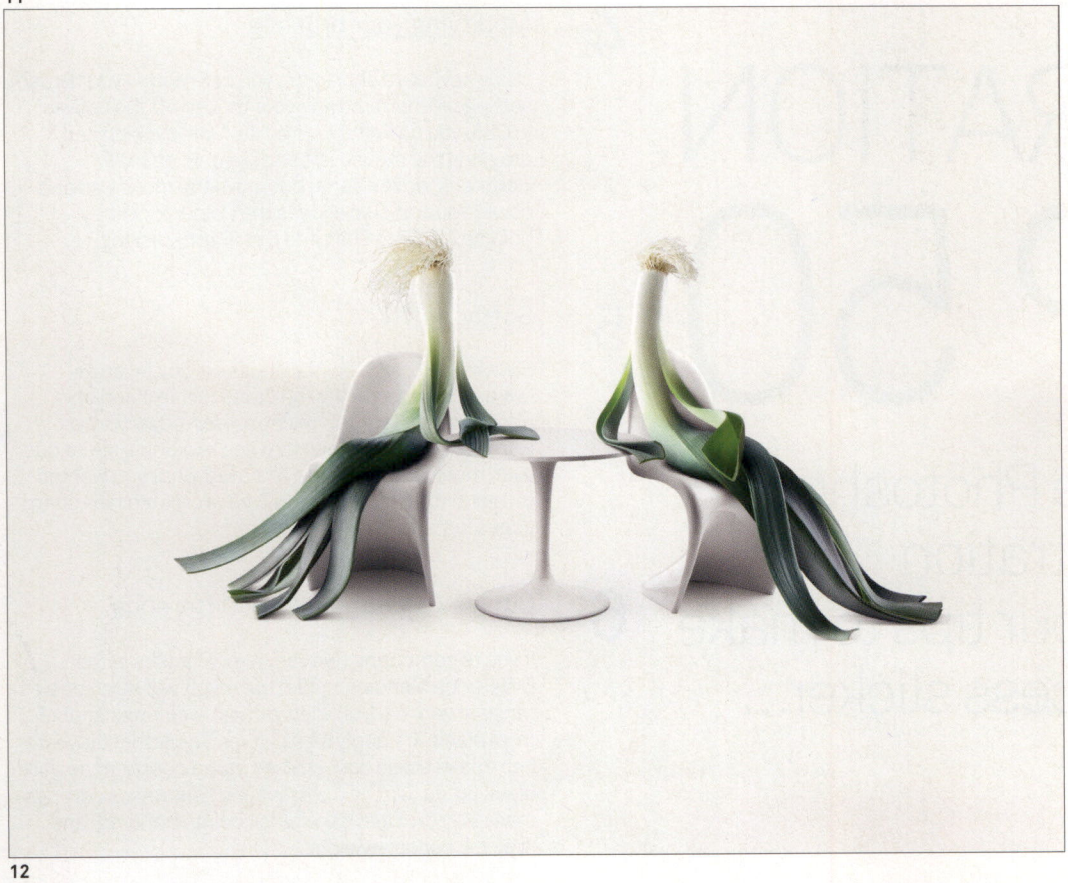
"Also, what is important as a retoucher is the feeling," adds Vin, "not the tools. It depends on you: when you have an idea, you look for the best tools, not the other way round."

And as Labeye points out, for the last 20 years or so virtually every published photo that you've seen has been retouched to some extent. "So in the mind of the public, all pictures are retouched. They've been conditioned to expect it." And so while Beefactory occupies a very specialised niche as a retouching studio, it's one that they expect to keep them busy for a very long time.

11 "It was funny to try and give a human expression to a carrot." This piece is one of a series of images Beefactory created for an ad campaign for Belgian manufacturer **Novy**

12 "These images were hard work, but it was made easier thanks to lots of photos and really **good sketches** from the art director," says Vin

11



12

Photography: Kris Van Beek (01, 03, 11, 12); Frieke Janssens (07, 09); Pierre Pironet (02, 04, 05, 10); 354 photographers (06)

Beefactory's top tips for Photoshop success

1 Buy the best

"Get the fastest computer with the most memory that you can afford – your Mac might be fine for everyday design work, but once you start with professional photography you'll quickly start encountering some enormous images that can eat all your resources before you've even done any work on them."

2 Practise makes perfect

"Always remember that you won't get a beautiful picture just because you have the latest version of Photoshop. Retouching is a discipline, just like any other area of design, and while the latest Photoshop has some great features, none of them are any substitute for practise and honing your skills. We've been retouching for 10 years and we're still learning!"

3 Look around you

"Observing how things look in the real world is invaluable in creating realistic compositions. The most important things are light and shadows, especially when combining multiple images. Keep the light direction in mind, and if you're not sure exactly how a shadow should look, try reproducing the set-up in the real world and observe that."

4 Work with people

"We spend a lot of time working on pictures where you can only imagine the result; it's hard to know what's in the photographer, art director and client's minds, so you need to communicate with them. Talk to the photographer before the shoot if you can, try things out and show them to the client, see how the client reacts and then go back and adapt accordingly. That's where the best results come from."

5 Where's the proof?

"Before we hand the final work to the client, we finish our job with a proof. It shows us how the picture will be printed in magazines, newspapers, posters and so on, much more accurately than just by looking at it on a screen. With a proof in hand we can modify some details and colours that we mightn't otherwise have noticed."

ILLUSTRATION TOP 50

Whatever role Photoshop plays in your illustration workflow, follow our tips to make your creative process slicker...

1 Integrate using the Blur tool

When cutting out studio shots that have a small depth of field, use the Blur tool on the edges of the different elements to help integrate them more realistically into your illustration. This can also give you more control: rather than just feathering the whole edge of the layer, with this method you can blur specific areas as much or as little as you need to.

2 Multiply it

When adding textures to objects and backgrounds, set the layer's blending mode to Multiply. Make sure that the area you don't want to see, such as the edges of the texture layer, are all set to #FFFFFF to avoid having a border around it. Other blending modes can create interesting effects too, so play around with them to see what works.

3 Take control of brushes

One of the most fundamental tools in Photoshop's arsenal, the Brush tool is too often underrated. Use it to brush colour straight onto a canvas, use it on a layer with a blending mode to achieve shading effects, or on a Layer Mask to control the opacity of a layer. But for ultimate control you need to create your own brushes by creating a texture and going to Edit> Define Brush Preset. You can then access that brush to paint with.

4 Modifying your brushes

Using keyboard shortcuts, you can modify your Brush settings without moving your mouse off the canvas. In CS5, you can alter Size by Alt/Opt+clicking and dragging the mouse left and right. To change Hardness, do the same but move the mouse up and down. You can also access the Colour Picker by holding Alt/Opt+Shift and Ctrl/Right-clicking.

5 Softly, softly

Always use a very low Hardness setting (even as low as 0%) when using the Clone tool to clean up photographic assets. Having a hard-edged Brush will only make the areas that you're cloning stand out even more: you may have removed what you wanted to, but in the process you will have created new sharp edges instead.

6 Curves Adjustment with Difference

If you're comparing two very similar layers in the Difference blending mode, the result will often be a range of very dark shades, almost indistinguishable from black. Try applying a Curves Adjustment layer to help make these dark colours stand out from the pure black pixels. Up the Contrast and Brightness settings massively (but leave the black point anchored) and they will become visible.

7 MERGE MULTIPLE LAYERS TO ADD EFFECTS

Ctrl/Cmd+Alt/Opt+E will merge your selected layers into a new layer while leaving the originals intact. This enables edits to be made quickly to a whole object without messing about performing the same adjustments to multiple layers, or constructing complex masks. On this image, the gun flare originally comprised five layers: by merging them to one layer, they were edited as one object, while retaining the original layers.

8 Brushing in colour

The Brush tool can also be a useful way to add colour to your illustrations. If you feel that a piece needs a touch of blue, for instance, make a new layer, paint over the relevant area using a soft brush, change the blending mode to Soft Light or Colour, then play with Opacity until you get the right tone.

9 Selective Colour

When working in a CMYK colour space, the colours can sometimes become quite dull, especially when converted from RGB. Selective Colour gives you the option to add cyan to blues, for instance, to ramp up the vibrancy in the image for better output in print.

10 Don't be afraid to exaggerate

To add depth and excitement to your illustrations, exaggerate individual elements with some extra shine and polish. This is particularly effective when working with images of people: adding shadows and highlights with Adjustment Layers can give an ultra-real feel. Once the layer is in place, brush the extra shadows in where required – you then have the option to increase or decrease the filter strength later.

11 Soft Light

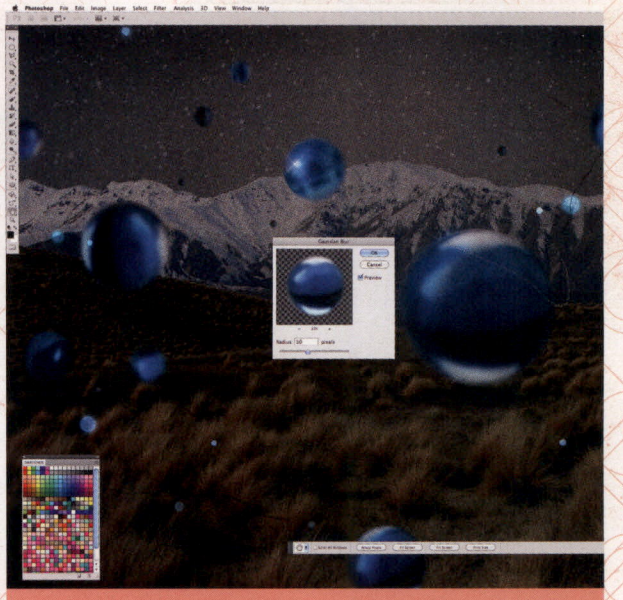
If you need to remove colour values from a full-colour object, try using the Soft Light mode. Add a new layer with a Clipping Mask, change the blending mode to Soft Light, and then paint with a soft round brush in areas where colour looks the weakest. Take your time, set the brush opacity to 20-30% and build up the layer. When finished, the elements should have a very rich colour.

12 Join the brush community

A huge online community of established artists is open to sharing their bespoke brushes with you, so make the effort to seek the brushes out, customise them further and build your own ultimate brush set. Don't forget to return the favour and share your creations with the wider community too.

13 Scrubby Zoom

The Scrubby Zoom function is a simple aspect of CS5 that can make a huge difference in the way that you work. It's all about saving time and making image manipulation more intuitive: you'll spend a lot more time refining at the pixel level thanks to Scrubby Zoom.



14 USE SMART FILTERS ON VECTOR OBJECTS

Smart Filters save you a lot of time, and are versatile too. When you paste a vector object into your piece as a Smart Vector layer, it's easy to add a filter of your choice and decide how much effect should stay. In the above image, Radim Malinic has applied a Gaussian blur to the spheres to emphasise the depth and sense of belonging, and partially removed the effect with a soft round Brush around the top-left edge.

15 The High Pass filter

If you like your images to be super-sharp and detailed, the High Pass filter is a great way of achieving this. Duplicate the layer in which you want to bring out the detail, then go to Filter>Other>High Pass. Use a low setting of 2-3, apply, and set the layer to Overlay. This sharpens all the detail, and brings out highlights too. →

16 Building vignettes

To make your illustrations pop, add a subtle vignette effect at the end of the process. Create a new layer at the top of the stack, and select the Gradient tool. With white as the cental colour and black as the outer colour, create a Radial gradient with the highlight at image's centre. Set this layer to Overlay or Soft Light, at a low opacity. This darkens the edges, brightens the centre and focuses the eye towards the action.

17 Bring the Noise

Another way to finish off a piece is to add a Noise filter. Add a new layer at the top of the stack, fill it black (or white, if you prefer), add a Noise filter (400%) and change the Opacity value of the layer to around 3%. This can help to prevent colour banding in gradients, and can also help to add some subtle detail to large areas of flat colour.

18 MOSAIC EFFECTS WITH THE SCATTER BRUSH

A technique designer Chris Haines developed is to mask an image, and bring parts of it back using the Scatter brush. This creates a great mosaic effect, where a figure or element is built using hundreds of tiny elements. This is demonstrated in Haines' *Play* series (a piece from which is pictured), where the athlete's skin is formed from tiny hexagons to create a DNA effect. Combined with layer drop shadows, this can create some nice 3D effects.

19 Spot the Difference

The Difference blending mode can work out the difference between the pixels in the layer it is applied to and in those below it. If there's no difference they'll appear black; complete opposites will appear white. To align two elements, set the layer you're moving to Difference, and then move it around until it appears black.

20 Smooth extraction

If an element that you want to extract has smooth, sweeping edges, then it's easier and more powerful to use the Pen tool rather than either the Brush or automated methods such as the Extraction filter. Draw around your object, making sure to close the path, then convert it to a selection via the Paths palette. Finally, add a Layer Mask and clean up the edges using the Brush tool.

21 Set up Actions

Setting up bespoke Actions for all the techniques and processes that you use regularly in your work can save a lot of time in the long run. This could be anything from adding the right contrast to resizing an image for the web. You can also exchange Actions with collaborators: go to your Photoshop folder>Presets>Actions, and zip up the relevant Action ready to email.

22 Quick blending

Even after years of using layer blending modes, it's difficult to predict exactly how an individual element will look until you've worked your way through all the different presets. The quick blending mode toggle gets around this issue: in the Layers palette, hold down Shift+Alt/Opt and run through the whole range by using the + and - keys, or jump straight to specific modes using shortcut keys (S for Screen, O for Overlay, and so on).

23 Take a shortcut

It's amazing how much time you waste using top menus for repetitive tasks, especially on a large monitor. Savvy designers permanently have one hand on the keyboard and the other on the mouse or Wacom pen: spend an afternoon setting up custom shortcuts for processes such as Hide/Reveal Layer, Add Quick Mask, Convert to Smart Layer and Add Guide, for instance.

24 Catch the Wave

The Wave tool (Transform>Wave) is a useful way to curve textures around shapes in your abstract illustrations. Simply make a Clipping Mask over the top of your shape, and drop a texture into that layer. You can then use the Wave tool to mould the texture around curved shapes: a great way to add depth to your work.

25 Colour-correct with Adjustment Layers

Before declaring any piece of artwork finished, always take the time to colour-correct the entire image using Adjustment Layers. Hue/Saturation, Colour Balance, Levels, Curves and Selective Colour are all essential

layers to add to your image, and Hue/Saturation also acts as a quick value check when painting images from scratch.

26 ADD 3D EFFECTS WITH DODGE AND BURN

The Dodge and Burn tools offer a really fast way to give a 3D feeling to your shapes. First, make a simple shape and fill it with a flat colour. Use the Burn tool, with Range set to Midtones and Exposure at around 25%, to brush shadows onto the edge of your shape. Then, use the Dodge tool to brush on highlights on the opposite side.

27 Fix your folders

If your Photoshop illustrations tend to accumulate hundreds of layers, having a good folder system in place can be an invaluable way to keep them under control. Divide them up into background, middleground/main elements, details, and final touch-up and Adjustment Layers at the top of the stack.

28 Save new versions

Get into the habit of making a new version of your file each time you're about to make a big change, or if you need to merge layers but want to preserve them in an earlier version. If you're worried about the space this will take up on your hard drive, delete or archive your work-in-progress once you know you're 100% finished.

29 Know your names

Try to avoid saving hundreds of files with generic and confusing filenames such as Filename_Final01.psd, Filename_Final02.psd and Filename_Final_Final01.psd. Organise files into folders according to the stage of the project – Research, Concept, Roughs, Final and so on – and at the end of the project, delete any minor changes. This can help save gigabytes of hard disk space, and also makes it easier when revisiting projects.

30 Hide disused layers

Keep a hidden folder at the bottom of your Layers palette, housing disused layers that you could potentially want to incorporate at a later date. This not only helps to keep your Layers palette tidy, but saves you time as you don't have to re-open files to access assets you may have deleted.

31 Nesting layers

To organise a large layer stack, nest layer groups inside each other and colour-code them. But bear in mind that you only have a very limited choice of colours – seven plus the default – so don't overcomplicate things by attempting to colour layers based on what's actually in them; focus on foreground, background, filters, adjustments and other simple defining factors.

32 Locating your layers

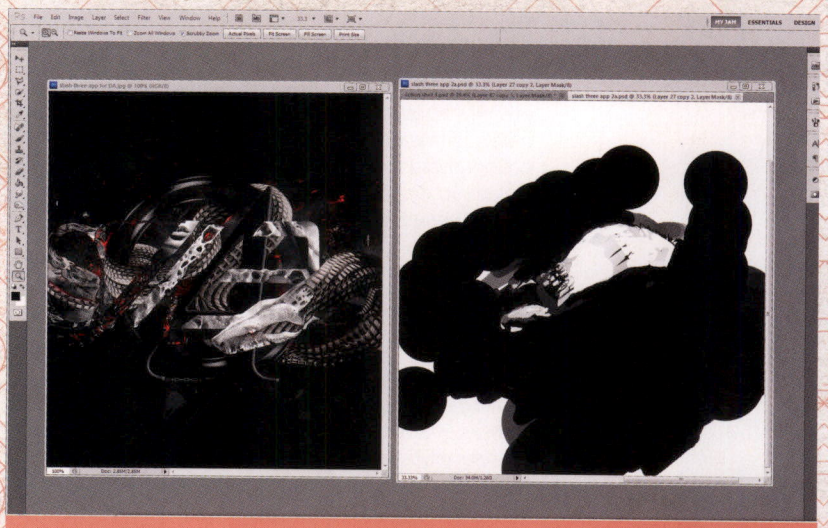
If you need to find a layer, remember that Right/Ctrl-clicking on the canvas will give you a list of layers underneath the point you've clicked. There are also the Auto-Select Layer and Group options with the Move tool. This can be useful for relatively simple files, but it'll struggle when dealing with transparency or blending modes.

33 PAINT SHADOWS QUICKLY WITH THE BRUSH TOOL

For a quick way of achieving shadows on elements using the Brush tool, use a Hue Adjustment Layer, mask out the parts where you want the darker areas to appear, and then bring down the Brightness. This is particularly useful if you're doing a quick mock-up or sketch, and need to paint shadows on several objects at the same time. Be sure to put everything in a group and set it to Normal, so it only affects the group you are working in.

34 Make your space your own

Take the time to customise your workspace. Work out which tools you use most often, and arrange them in a consistent and easily accessible place: this will make your entire Photoshop experience more fluent. Once you're happy with your workspace, save it (Window>Workspace>New Workspace).



35 HIDE UNWANTED ELEMENTS USING LAYER MASKS

Using a Layer Mask as an alternative to the stock Eraser tool gives you a much greater degree of freedom when it comes to extracting, erasing and rebuilding different aspects of your image. Use this in combination with different Brushes to further customise your results.

36 Beware the Clones

One of the problems with the Clone tool, and an immediate giveaway to a cloned area, is texture repetition. This happens when the same area is cloned again and again and you end up with a string of the same pixels being repeated, producing an autostereogram effect. Avoid repeatedly cloning in the same direction, and use the Patch tool to vary the texture over cloned areas.

37 De-fringing with the Clone tool

Another use for the Clone tool is de-fringing. When extracting elements of a photo, you can often end up with a 'hole' effect: small amounts of the background showing around the edges of your extraction. The Defringe tool can be a quick way to fix this, but sometimes produces odd results. By locking the Transparency of your extracted layer, clone from just inside the layer's edge towards the edge itself. This will seamlessly copy over any halo pixels with pixels from your extraction.

38 Cut it out

A new tool in CS5, the Quick Selection tool can prove invaluable for cutting small, simple elements out very quickly, or if you're mocking up a rough concept that doesn't need to be perfectly polished. Be sure to save the original by using a mask; this way, you can always go back to make changes later.

39 Flip out

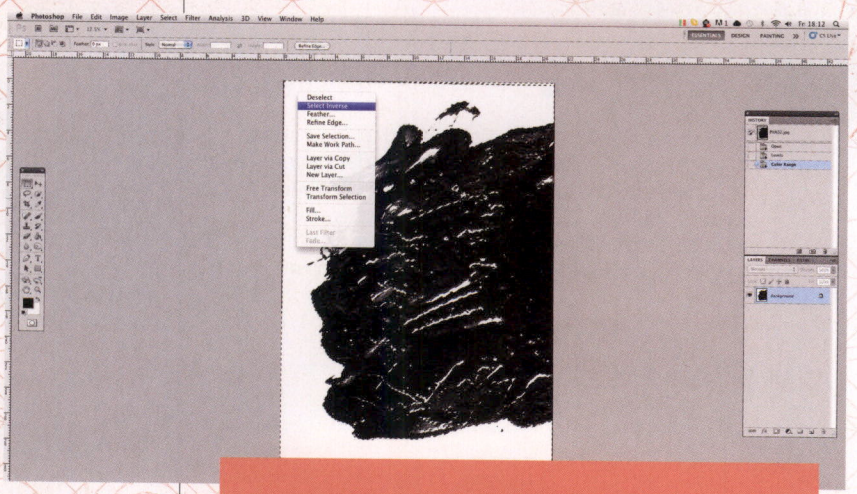
When you're planning an illustration, flipping the canvas horizontally is a great way to get a fresh look at your image and to check for compositional flaws. It's important to do this often, but when the file exceeds a gigabyte this can become quite time-consuming. Use Ctrl/Cmd+Shift+E to Merge Visible Layers before rotating, then step backwards to return to editing. It may take a few more steps, but the time you save is well worth the effort.

40 Take control with Gradient Maps

Gradient Map Adjustment Layers give you full control of the overall atmosphere, colour composition and palette of your illustrations, and most importantly enable you to tweak these quickly and easily as work progresses, without affecting other elements.

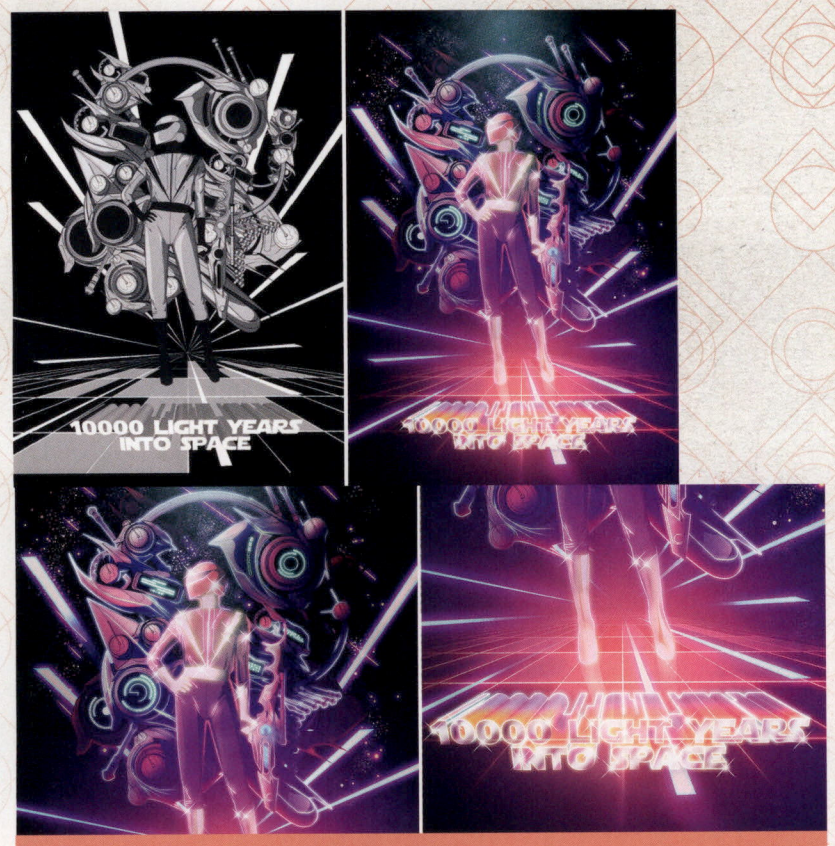
41 Masks meet Gradient Maps

Masks and Gradient Maps, used together, can be a great way to control the mood of a piece, and it's possible to achieve some psychedelic effects by blending vibrant colours in a harmonious way, using a soft Brush to smooth the transition.



42 INTRODUCE COMPLEX TEXTURES WITH COLOUR RANGE

Colour Range is a quick and very accurate technique for cutting out intricate textures, and tends to work best with black-and-white images. Bring your texture to the top of the Layers palette, change it to black-and-white (Ctrl/Cmd+Shift+U), and ramp up the contrast. Then go to Select>Colour Range>Select Highlights to select the white on your layer. Finally, using the Marquee tool, Right/Ctrl-click and select Inverse: you can use this selection to create masks, or simply fill it with colour.



43 CREATE RETRO-FUTURISTIC GLOW EFFECTS

By combining masks, glow effects and the Brush tool, it's possible to give various objects and figures in your composition a distinctive atmospheric lighting. First, apply a centred stroke with an outer flow on a separate layer. On the same layer, apply an inverted Layer Mask. Then, with a soft brush at 0% Hardness, reveal the glow effect gently to avoid a harsh border between the elements and the background.

44 Get vectored

Incorporating vector elements into Photoshop can add extra dimensions to your work. You can either import these as Smart Shapes to retain their scalability, or convert them to pixels to apply the same stylistic techniques as the rest of your piece. If you choose the latter option, however, make sure that the canvas proportions match to avoid distorting them.

45 Get to grips with masks

As a Photoshop illustrator, it's essential to get a strong command of masks. Try combining a Vector Mask with a Layer Mask on the same layer to give you ultimate flexibility. Ctrl/Cmd+click on any of your other layers to add that selection to your mask, building up a more complex shape. You can also use any Brush sets you have to add to your masks.

Images (in order of appearance) courtesy of: Nik Ainley, Radim Malinic, Christopher Haines, Perttu Murto, Niklas Lundberg, Rob Shields, Max Spencer, Kervin Brisseaux

46 Build in blur

Once your illustrations are complete, try softening them by applying a Lens blur or a Shape blur, faded to a Soft Light blending mode at about 30% Opacity. Alternatively, a Gaussian blur can be effective if the other options take too long to process – they can be pretty intensive, especially on very large images.

47 Resizing for the web

If you need to resize an illustration created for print for use on the web – on your portfolio site or blog, for instance – scale it down to 600px wide, and change the colour profile to RGB. Go to View>Proof Setup> Monitor RGB (or Ctrl/Cmd+Y) to preview how it'll look: this will help you to adjust the colours accordingly. When you're happy, go to Save As, and don't embed the colour profile.

48 Bespoke colour with the Pen tool

One straightforward but effective way to add bespoke colour and texture to custom shapes is simply to draw them with the Pen tool, Right/Ctrl-click and choose Make Selection. Then paint directly into the selection using the Brush tool or Gradient tool, or paste a texture into it.

49 Speed up with Direct Selection

Direct Selection of elements can save a great deal of time without the need to scroll through your Layers palette. With the Move tool active, Auto Select unchecked in the Options bar and the option set to Layer instead of Group, simply Ctrl/Cmd+click on an element and its host layer will be selected. If you have Adjustment Layers at the top of your stack, make such you lock them so you can select the elements underneath.

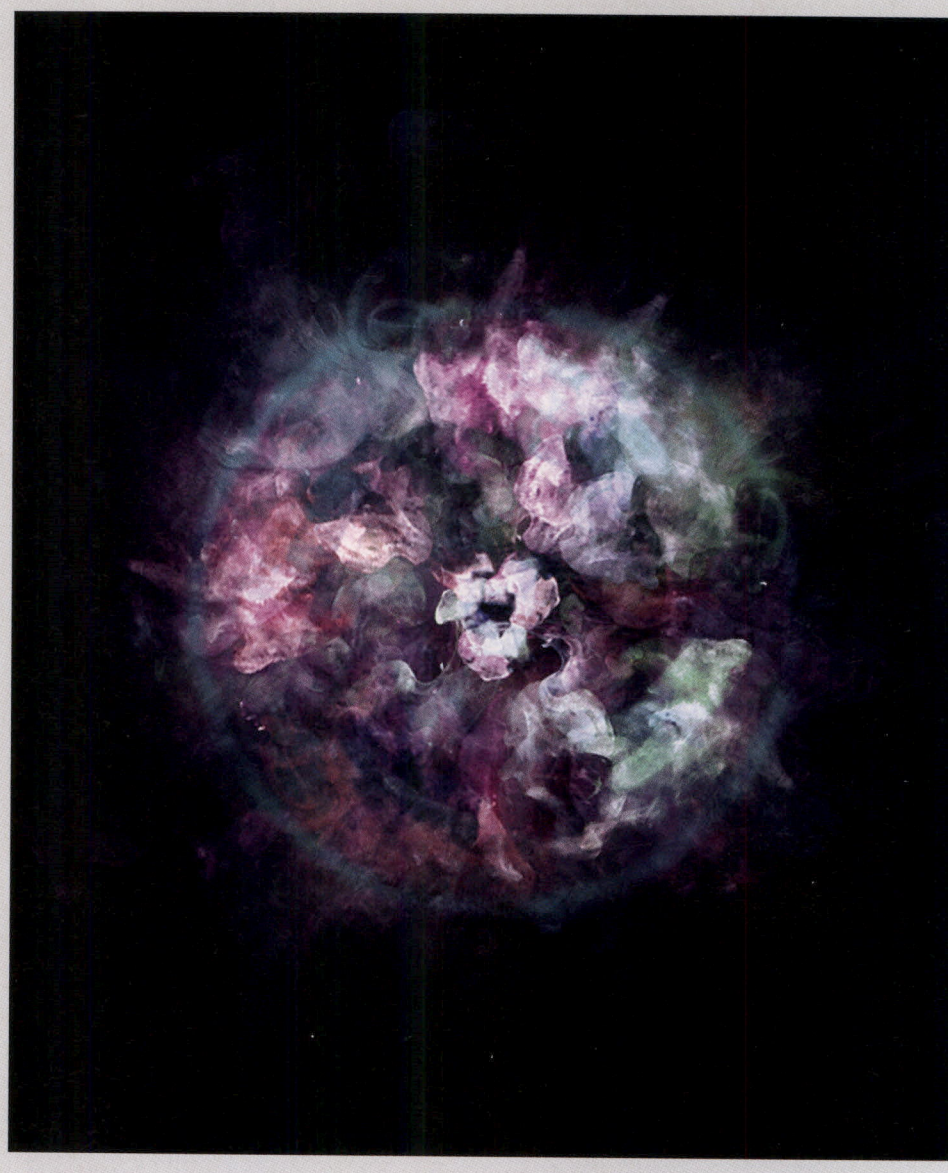
50 Naming via drag-and-drop

When working with lots of photographic elements in a collage piece, it can get chaotic quite quickly if you don't name all your layers as you go. The simplest way around this is to drag-and-drop images from Finder straight into your Photoshop canvas, rather than importing them through the usual channels. The layer will automatically assume the filename in the Layers palette, making it much easier to identify.

Photoshop CS3 or later

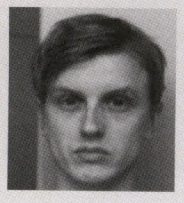
Transform paint and pixels with blending modes

Per Gustafsson demonstrates how to create unique artwork by mixing handmade and digital techniques



Digital art is a rapidly growing industry and it can take something special for your work to stand out. Originality is key. One solution that I recently used to create a new series of unique artworks was to go back to where I started – photography and paint – and incorporate a range of digital composition techniques.

This tutorial is all about how to combine different media to push your style further, and create new work out of the basics. I'll show you how to manipulate photography, and experiment with both digital and analog techniques to create your own, original artwork.

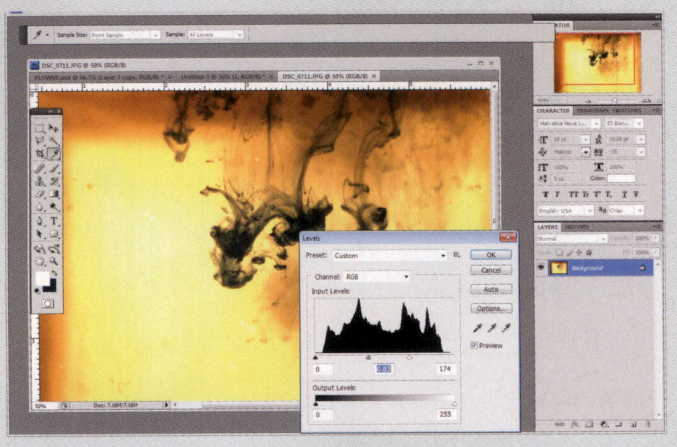


Per Gustafsson
Also known by his Modern Style moniker, Per is a pioneer of Photoshop-based digital art and has been featured in numerous books, magazines and exhibitions. His illustrations are also sold through Getty Images.
www.modernstyle.se

Time needed
2 hours

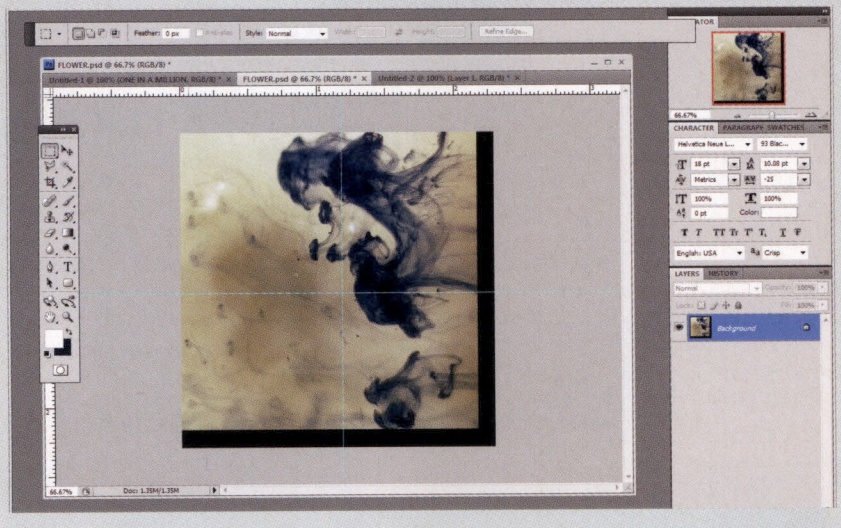
Skills
- Create unique compositions
- Get to grips with blending modes
- Incorporate photography into your work

01 First, create some effects using handmade techniques and photography – I've taken a water-based approach. Fill a transparent vessel (like a fish tank) with water, and drip watercolour and acrylic paint into it. Big blobs make stronger shapes, darker colours are easier to photograph, and you'll get cleaner shots with good light and a fast shutter speed. This is a great way to make unique creations, as every shape is different.

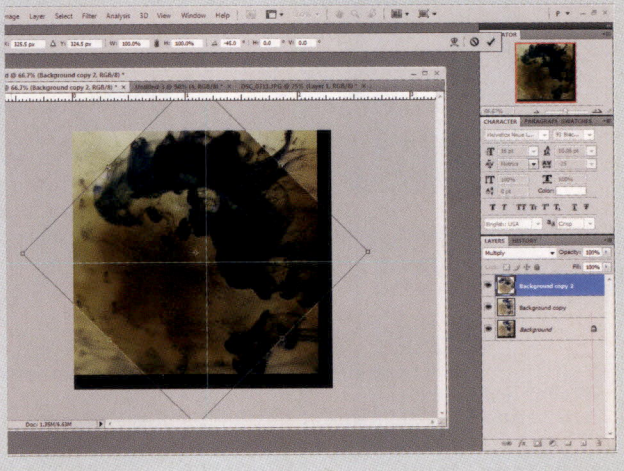


02 ____Now select the photograph you want to use and open it in Photoshop. Sharpen your image (Filter>Sharpen>Sharpen) and increase the contrast (Image>Adjustments>Brightness/Contrast). Next, adjust the levels to make the image even sharper and the shapes stronger. I also increase the brightness of the background and choose black for the main objects.

03 ____In order to avoid making the piece look overexposed, create a new layer (Layer>New) above the first. Click on the layer in the Layers palette, and go to Edit>Fill, select 50% Gray from the Use drop-down menu, change the blending mode to Hue, and Opacity to 50%. Experiment with different layer effects, and duplicate the layer to see how many background objects can be removed without destroying the composition. You want the main focus to remain sharp and visible.

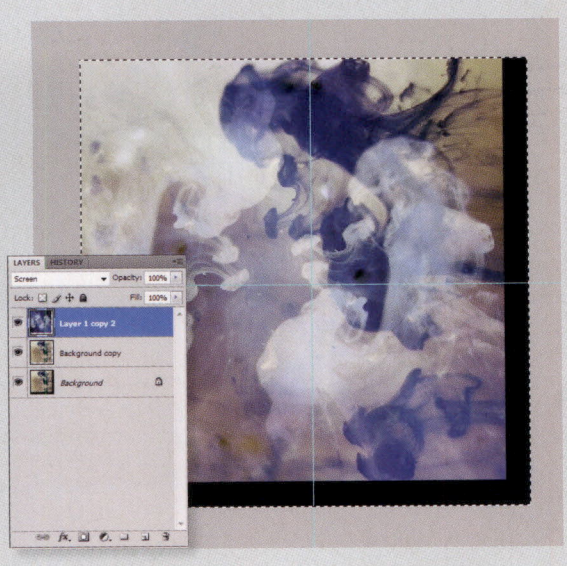


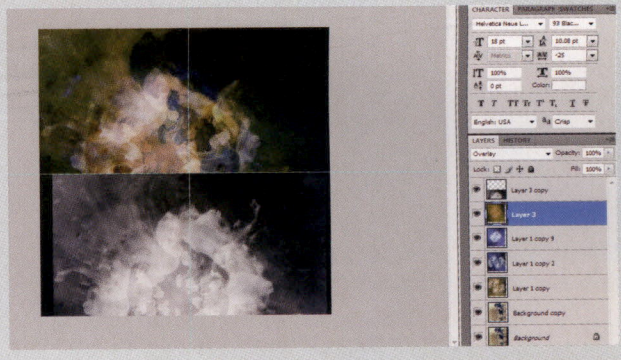
04 ____Now let's play with the main effect. To do this, crop part of it and paste it into a new Photoshop file. Here, experiment with morphing and distorting the object into new shapes. Rotate these, and play around with different colour adjustments (Edit>Transform and Image>Adjustments).



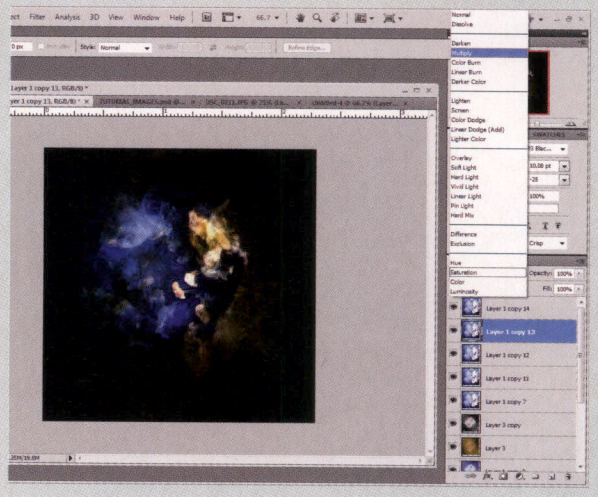
05 ____In the Layers palette, start duplicating the layers (by dragging the layer you want to duplicate onto the New Layer button) and select Multiply as the blending mode. To keep the symmetrical pattern, hold down Shift when you transform the object. This will make the layers snap to the invisible grids when you're twisting and moving them.

06 ____I brighten up one of the layers by using the Screen blending mode. I duplicate the layer and rotate it by a further 20 degrees, and continue doing so until I end up back where I started. If it becomes too bright, just duplicate the Multiply layers, and vice versa with the Screen layers. This is a sensitive technique that requires you to get the balance of the layers right, without destroying the object and making it too chaotic.



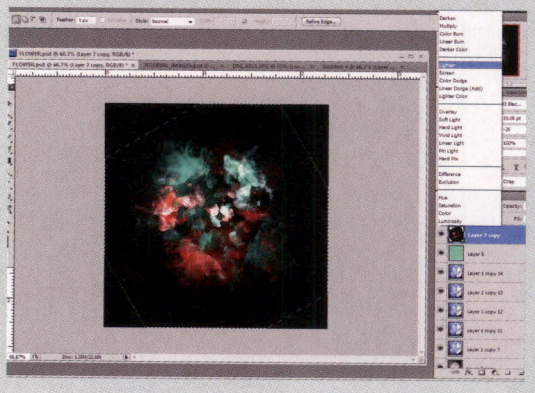


07 ____Try out different layer effects, colour schemes and tints. Based on the effect created in Step 6, merge the layers into one composition, then create one in black and white, and another using different colours. You can also use different level adjustments or Hue/Saturation values (Image>Adjustments> Hue/Saturation) to make the colour smoother. →

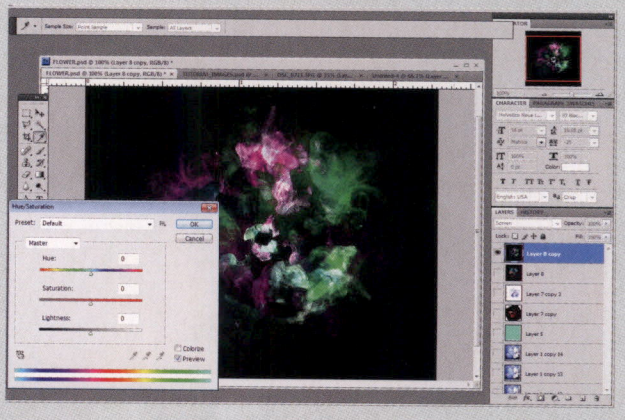


08 Next, go back to the layer you added the Screen blending mode to in Step 6. Duplicate it, and position it above the other layers. To make the image darker and more mystical, change the blending mode to Multiply, and duplicate or clone the layer until you achieve the level of darkness you want. Try to keep the details visible by not adding too much Multiply.

09 Now add a colour layer on top of these layers, and adjust it with the Hue/Saturation effect (Image>Adjustments>Hue/Saturation). This is to make all the details more visible after making the artwork so dark. You can also add a different blending mode to the colour layer, such as Screen or Colour Dodge, to make the details more visible if necessary.



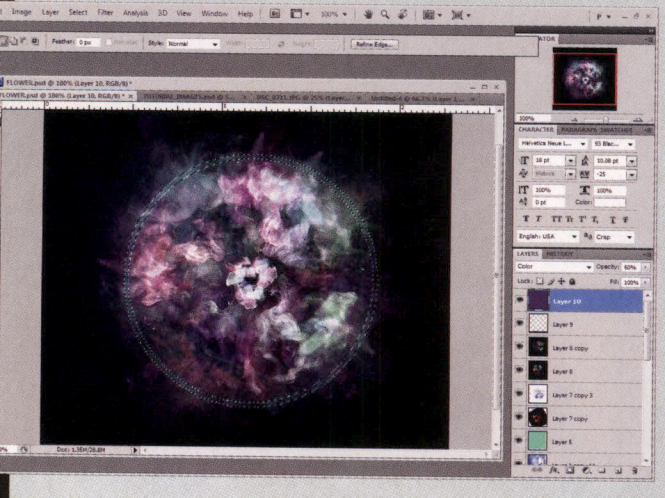
10 Mark the layers to which you added the blending mode Multiply, then merge them into one composition and move that layer to the top. Change the colours in this layer, either by making some colour adjustments or by inverting the layer completely. Next, add the Lighten blending mode and start to rotate this layer on top of everything that you created earlier.



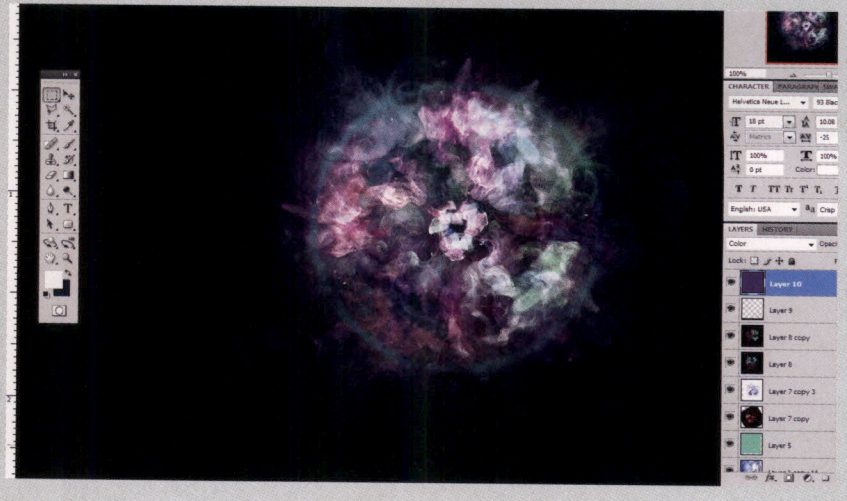
11 In order to make the image even more colourful, copy the whole scene into one new layer using Edit>Copy Merged. Then make some colour adjustments to the layer, adding Screen as the blending mode, and transform it by rotating the layer. Repeat this step a couple of times, but remember: less is more.

Mix it up

The beauty of the techniques described here is that they can be applied to any kind of effect, and will produce different results every time. By also experimenting with different media and the options in Photoshop, you'll be able to create unique images that stand out.



12 Lastly, add some digital elements to the composition to bring it all together in a perfect mix. This will create a greater sense of depth and, by adding some new elements on top, will distort the sense of reality. For the elements, Ctrl/Right-click with the Marquee tool, and stroke to create simple lines that you can twist or deform, with the Filter Shear or Wave tools for example. In addition, you can also experiment with the Displace filter (Filters>Distort>Displace).



13 For the final artwork, I add a colour layer on top with an opacity of 40% as I don't want to overpower the ambient feel. The colour helps to tie the different media – the paint, water and pixels – together, and finalises the composition. There you have it: a set of techniques that will produce unique results every time.

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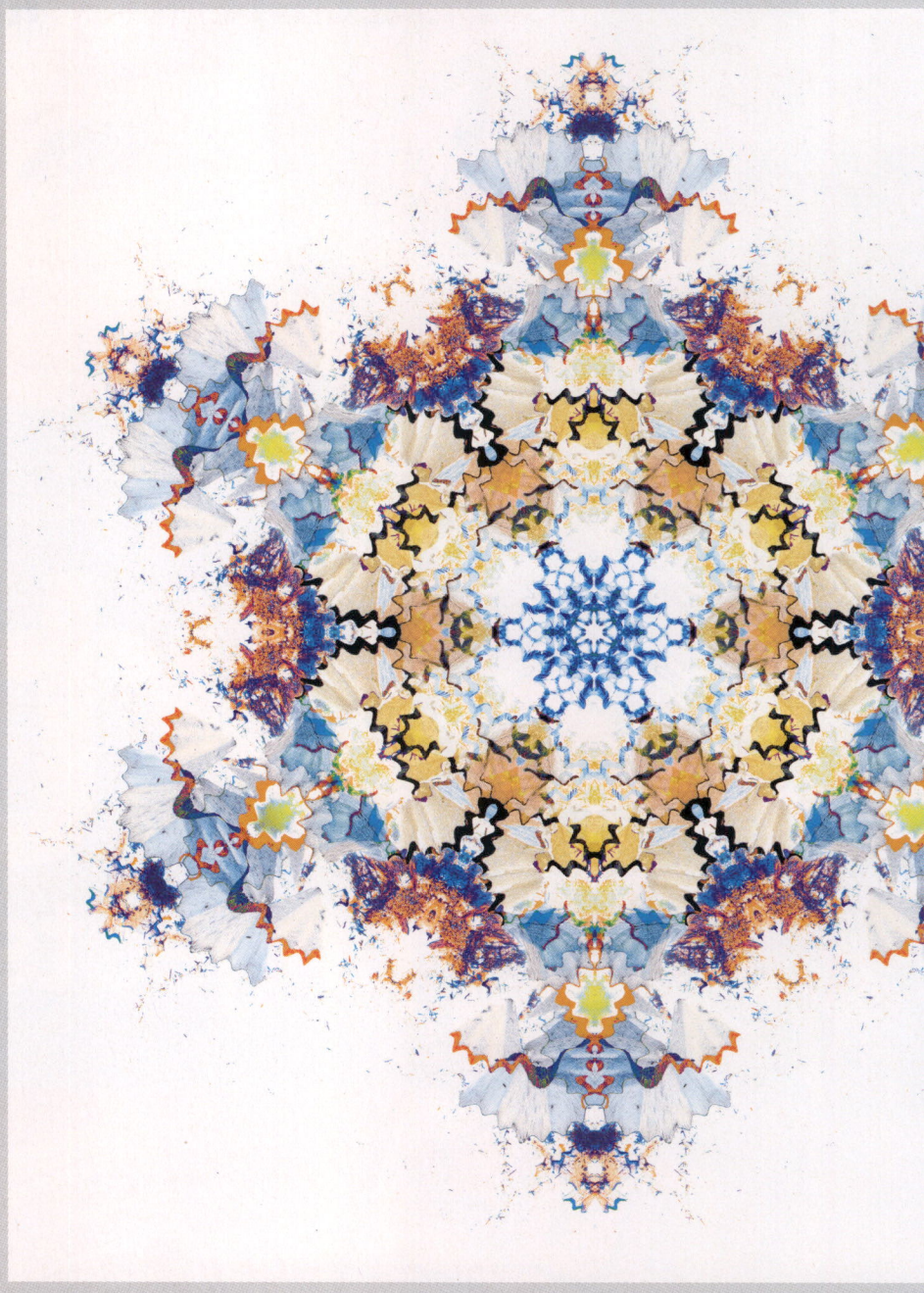
Photoshop CS3 or later

Intricate designs from found materials

Andrea Stark demonstrates how to transform everyday, throwaway objects into uniquely detailed decorative artworks



Pattern, repetition, symmetry and balance are all principles of design that are inherently attractive to the typical human eye. My final-year university project explored the value of decoration, and during my research I wondered why we so often create decorative patterns out of things that we already consider to be beautiful (such as flowers, organic forms, geometric shapes and so on), when the same effect could be achieved by applying those same design principles to almost anything.

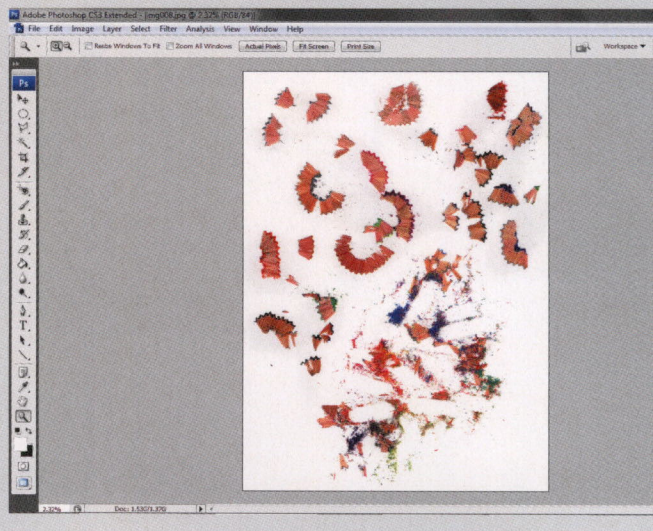
In this tutorial, I'll show you how you can use Photoshop to transform everyday materials by manipulating colour and using layers, masking and blending modes. The process is unpredictable – it requires a bit of exploration, and you'll never get the same result twice. I'll also show how to add a flexible process to your workflow so that you can go back and adjust your designs at any stage.

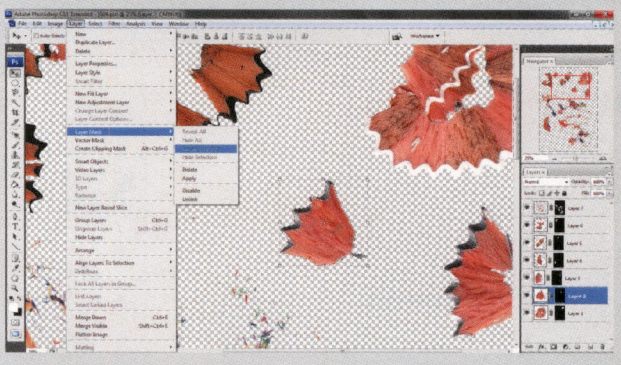
Andrea Stark
Andrea, 22, graduated from Massey University in 2010 and is now a freelance illustrator and interactive and graphic designer in Wellington, New Zealand. www.andreaalice.com

Time needed
4-6 hours

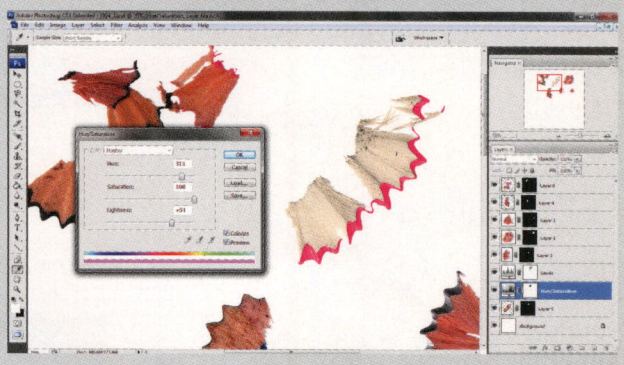
Skills
- Managing layer-intensive projects
- Using Layer Masks and Adjustment Layers
- Flexible design processes
- Mastering colour manipulation techniques

01 First, select a range of materials to use as your content; for this design I've chosen pencil shavings. Don't worry about your objects looking particularly spectacular to start off with – the point is to transform any ordinary objects. Scan them in at at least 300dpi, and open Photoshop. The higher the resolution at this stage, the more detail you'll have to work with – I've scanned mine at 1800dpi.

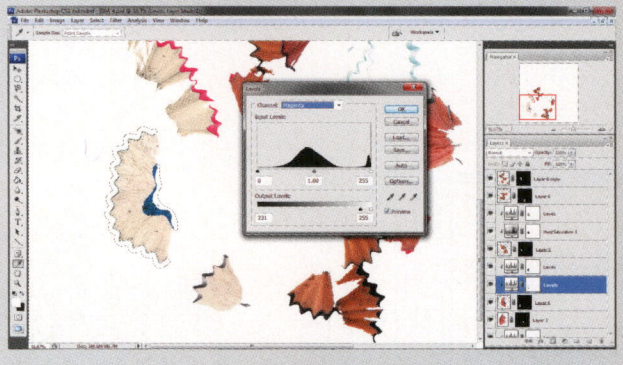




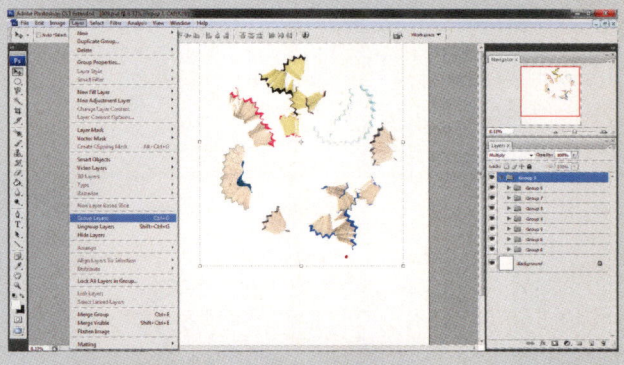
02 ___ Divide your objects up and apply Layer Masks to hide the background (Layer>Layer Mask>Reveal Selection). The nature of your items will determine which selection technique you use. For larger shapes, I use a combination of the Polygonal Lasso tool and the Magnetic Lasso to trace around high-contrast edges. For the finer shavings, I use the Magic Wand tool to select the white background, then invert the selection and tweak it with Select>Refine Edge.



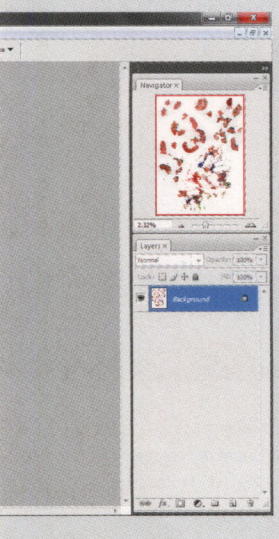
03 ___ Create a new document with a plain background, and drag your objects onto it. Now you can start manipulating the colours of your objects by using Adjustment Layers to get the effect you want (Layer>New Adjustment Layer). I've played with the Levels options and with the Hue/Saturation. Just like the Layer Masks, the Adjustment Layers won't change the original image, so the file remains flexible to enable you to go back and make changes further along in the process if you want to.

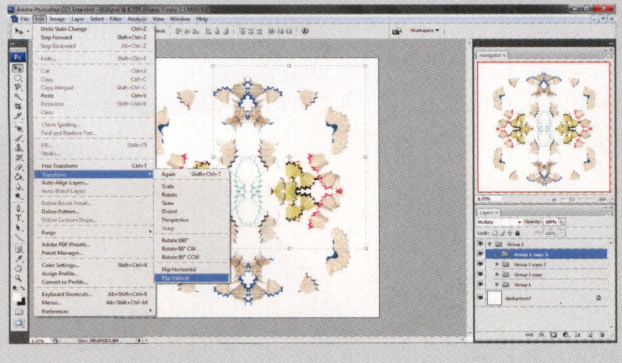


04 ___ With an Adjustment Layer highlighted, select Layer>Create Clipping Mask so the adjustments will be applied only to the layer directly beneath it. I've also added Layer Masks to my Adjustment Layers to separate the coloured edge of the shavings from the rest of the wood, so that I can manipulate these sections independently. I've increased the saturation of the outer edges and changed their hue, while lightening and decreasing the saturation of the rest of each shaving.

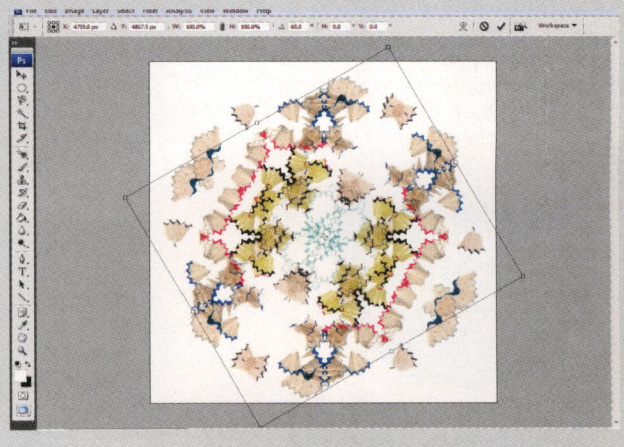


05 ___ There's no need to go overboard with colours, because you'll be duplicating these layers, which will add complexity and density as the colours overlap. It's best to group each layer with its Adjustment Layers to avoid confusion and to keep things tidy when you start duplicating. Once you're happy with your colour adjustments, arrange your objects randomly and group them together by selecting Layer>Group Layers.

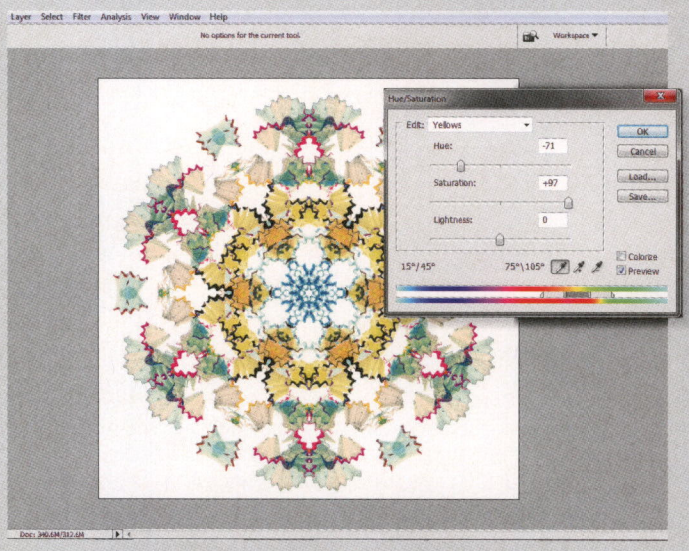




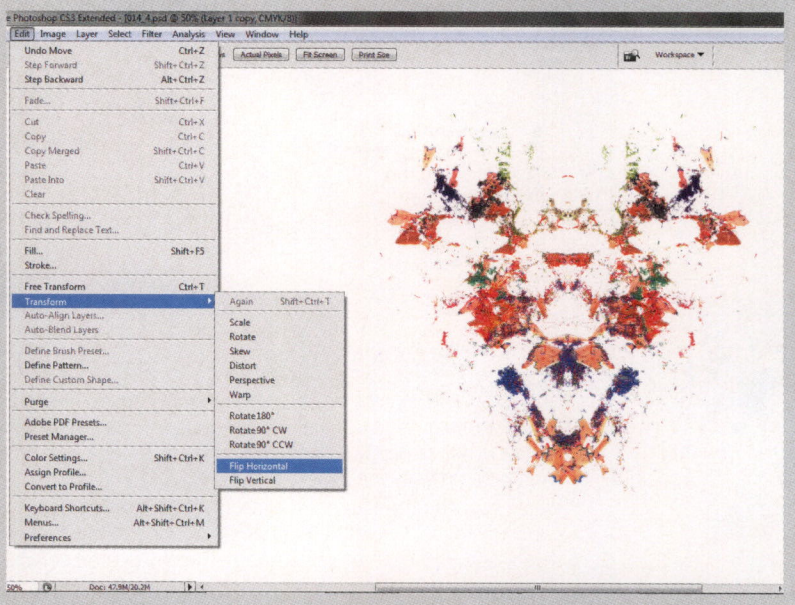
06 ___ Set the group's blending mode to Multiply (from the drop-down menu in the Layers window) so that the layers look integrated as they overlap. Duplicate the group by choosing Layer>Duplicate Group, and then flip it horizontally by clicking Edit>Transform>Flip Horizontal. Hold Shift while dragging the new group across the document until you're happy with the overlap position. Duplicate both groups and flip them again, this time vertically. Hold Shift as you drag them upwards into position. Now group everything together as one.



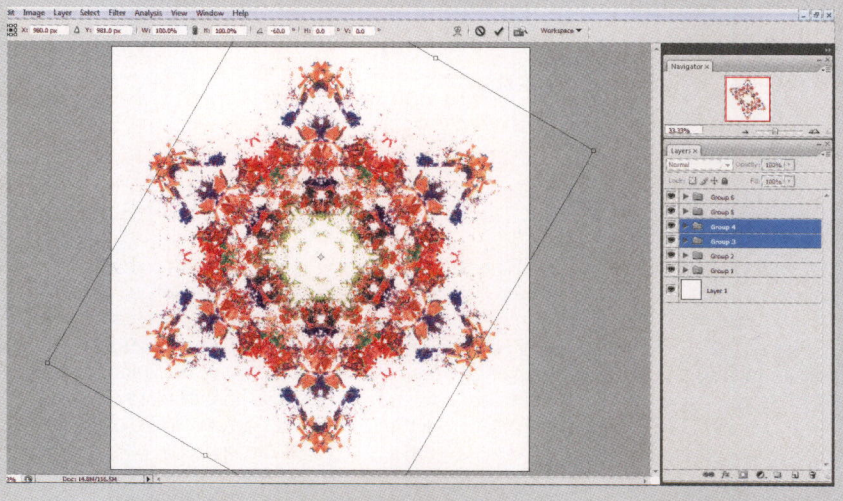
07 ___ Duplicate your main group, then rotate this new one 60 degrees clockwise (Edit>Transform>Rotate). Duplicate it again and rotate this layer another 60 degrees. Make sure the blending modes of all groups are set to Multiply. At this stage, if you're happy with your composition you can merge all the layers into one (Layer>Merge Layers). But save a version of your file first, in case you need to go back and edit pieces later. →



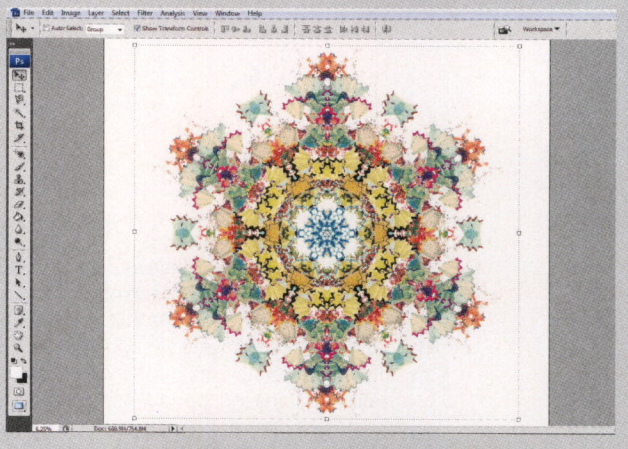
08 ___ Although you've already edited the colours of your original objects, you might want to make some further adjustments now that you've combined all the layers. For this, create a new Hue/Saturation Adjustment Layer. Now select individual colour presets from the Edit drop-down menu in the Hue/Saturation dialog box so that you can go in and alter various colours individually.



09 ___ To add more detail and variation in the texture of the piece, I'm now going to incorporate some of the finer pencil shavings from my original scan. Begin creating a separate design, using a similar process to earlier. Duplicate your layer, reflect it horizontally and move it into position while holding Shift.



10 ___ Continue with the same processes used in Steps 6 and 7 until you have a design in the same format as your first one. The colour scheme of your initial shape will determine which colours you choose for this second layer, so you don't need to worry about editing it until you've combined the two, when you'll see what works well.



11 ___ Drag the new design in behind the first layer of your original document, and align it with your composition. The combination of your two designs will probably look a bit too complex, so you'll need to edit it to co-ordinate the overall image. Add an Adjustment Layer and change the hues of your new layer so that they complement the original colour scheme.

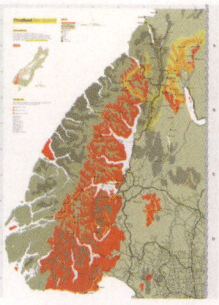
Visual CV

In pictures: a guide to the career and work of our Technique writers

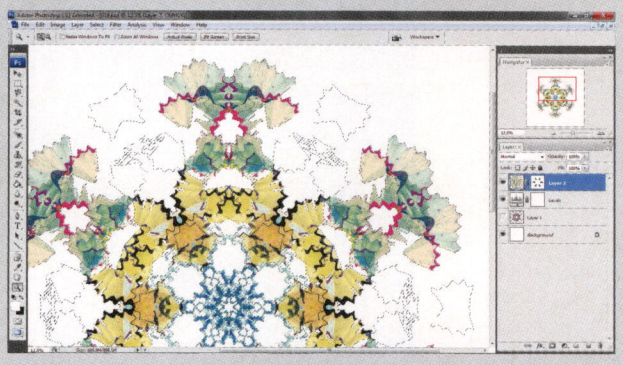
Andrea Stark

The illustrator/graphic designer guides you through some of her projects to date...

Island resort interactive map – October 2009
Stark loved combining vector illustration with traditional watercolour painting in this interactive touch-screen map concept for a resort.



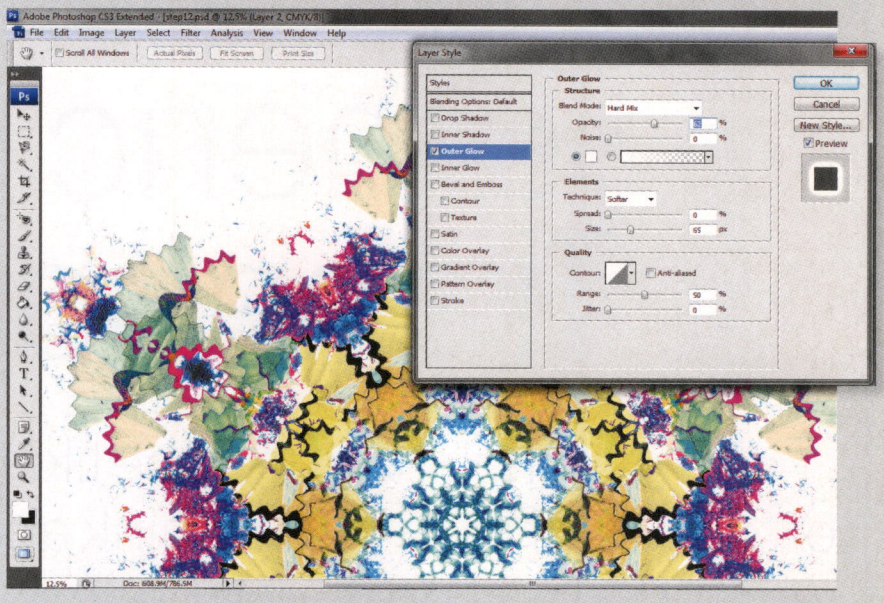
Mohua – May 2010
This dual-function map of Fiordland National Park shows scenic walking tracks while also providing information on the last remaining populations of Mohua, an endangered forest bird native to New Zealand.



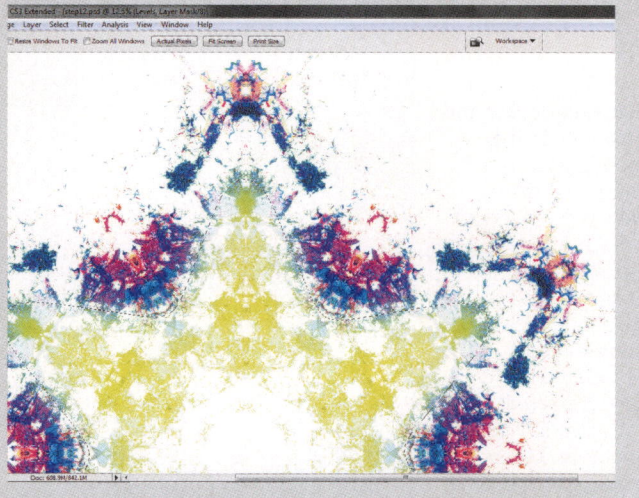
12 Add a layer mask to hide a few sections of your top layer, so that more of the new pattern will be seen coming through from underneath. Work systematically around the whole composition so that it remains symmetrical.

Save, save and save

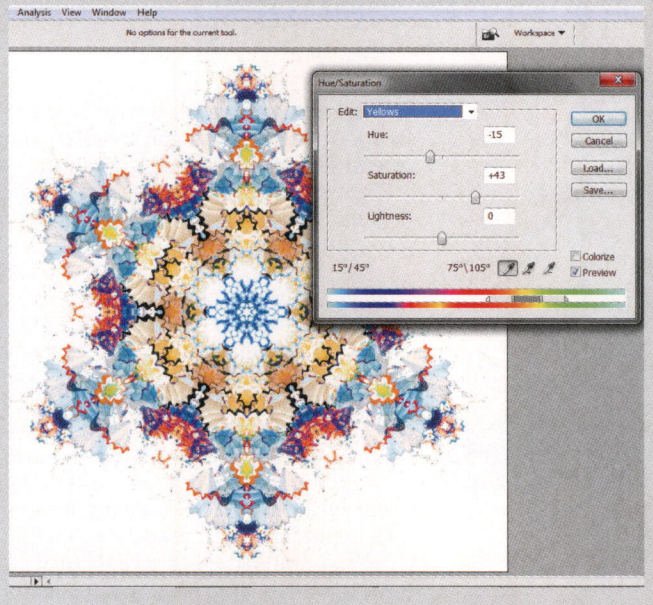
You can easily generate a selection of images from the same starting point, so save your design at points during the process when you produce something you like.



13 Add an outer glow to your top layer (Layer>Layer Style>Outer Glow). This will define the edge and stop it becoming lost among the details of your second layer. You should then play around with the Opacity, Spread and Size settings until you find the right balance for your glow. I've set the blending mode of my outer glow to Hard Mix so that it complements the sharp texture of the fine shavings beneath.



14 To tone down the second shape, add a Hue/Saturation Adjustment Layer, with a mask that reveals only its inside. In Hue/Saturation select Colorize, then match it to your first layer.



15 Finish it off by making some final small adjustments to bring your design together as a whole piece. Use Hue/Saturation to adjust the individual presets and simplify your colour scheme. Unify your design by choosing the same selection of colours for both layers.

Wedding invite – July 2010
The design of this invite involved creating a selection of personalised illustrations of scenes that were special to the couple.

Analog – August 2010
This is an experimental 'decorative info-graphic' that documents the process of checking the time on an analogue watch over the course of a week.

Shopping Receipts – November 2010
Part of Stark's final university research project was a series of prints demonstrating the transformation of everyday objects into artworks.

Emeric Trahand

"Photoshop has become like an extension of me – I don't think about what I do, I just do it." The photomontage specialist on why experimentation is key, and why his biggest project last year was also his most challenging

Emeric Trahand
This French, New York-based designer and art director is known for the surreal feel of his illustrations, which have been commissioned by the likes of EMI, Adidas, GrandPrix de Montreal and the English National Opera.
www.stillontherun.com

Since bursting onto the design scene in 2006, Emeric Trahand – AKA Takeshi – has been steadily gaining traction in the creative world. His stunning surreal photomontages have caught the eye of an impressive list of big-name clients including Nike, Toyota and Adidas, and the New York-based art director and artist shows no sign of slowing down.

A quick glance at his online folio, Stillontherun, and you'd never guess that only a few short years ago the self-taught creative had no idea he would become a freelance illustrator. "My mum was an art teacher, which definitely influenced me, but I went to university and graduated in marketing and international business," he says. "I started playing with Photoshop during my last year of university for fun, producing flyers and posters for local parties and friends, and slowly got more serious about it. Things started to become clear when I got my first commissions; before that, illustration was a passion I didn't associate with a job."

Trahand's distinct surrealistic style combines striking light treatments with dynamic, organic elements. However, it's his focus on the balance of shape and colour that makes his work stand out. "At first I was inspired by other designers and illustrators – initially very closely; then more episodically," he explains. "This made me improve tremendously on a technical level but still didn't get me a personal style." Time and hard work provided the rest: by making mistakes and experimenting with different techniques, always pushing at the boundaries of his ability, Trahand built up a sum of knowledge that enabled him to refine his vision.

Experimentation continues to be key to Trahand's creative development: nowhere is this more evident than in last year's European print campaign for Onitsuka Tiger. His biggest project in the past 12 months, it was also – crucially – the first time he used his now-trademark 'flower style' in a professional capacity. "The whole thing was pretty challenging because I had to produce a professional version of very humble experiments," he recalls.

Tasked with promoting the Limber Up Moscow sports shoe, Trahand produced three posters paying colourful →

01

01 Trahand used flowers in his 2010 collaboration with **G-Shock** for *Graffiti Arts* magazine to express the robustness of the watch: "I wanted to ornament the watch in a harmonious way."

02 'Central Park' was created as album artwork for rapper Asher Roth. Trahand spent a lot of time creating the right light and definition on different elements

03 "My main project last year was the European print campaign I did for **Onitsuka Tiger**," says Trahand. "It wasn't a regular contract – more an artistic collaboration with the brand."

04 'Staple Pigeon' is a T-shirt design for Jeff Staple's next collection at Berlin's 2011 *Bread & Butter Supershow* clothing event

05 This personal piece, **'A Suspended Horse'** was created by Trahand for an illustration competition in 2010

06 'Mandala'. "My work is more about making small decisions for each and every element than about a specific tool or technique," Trahand explains

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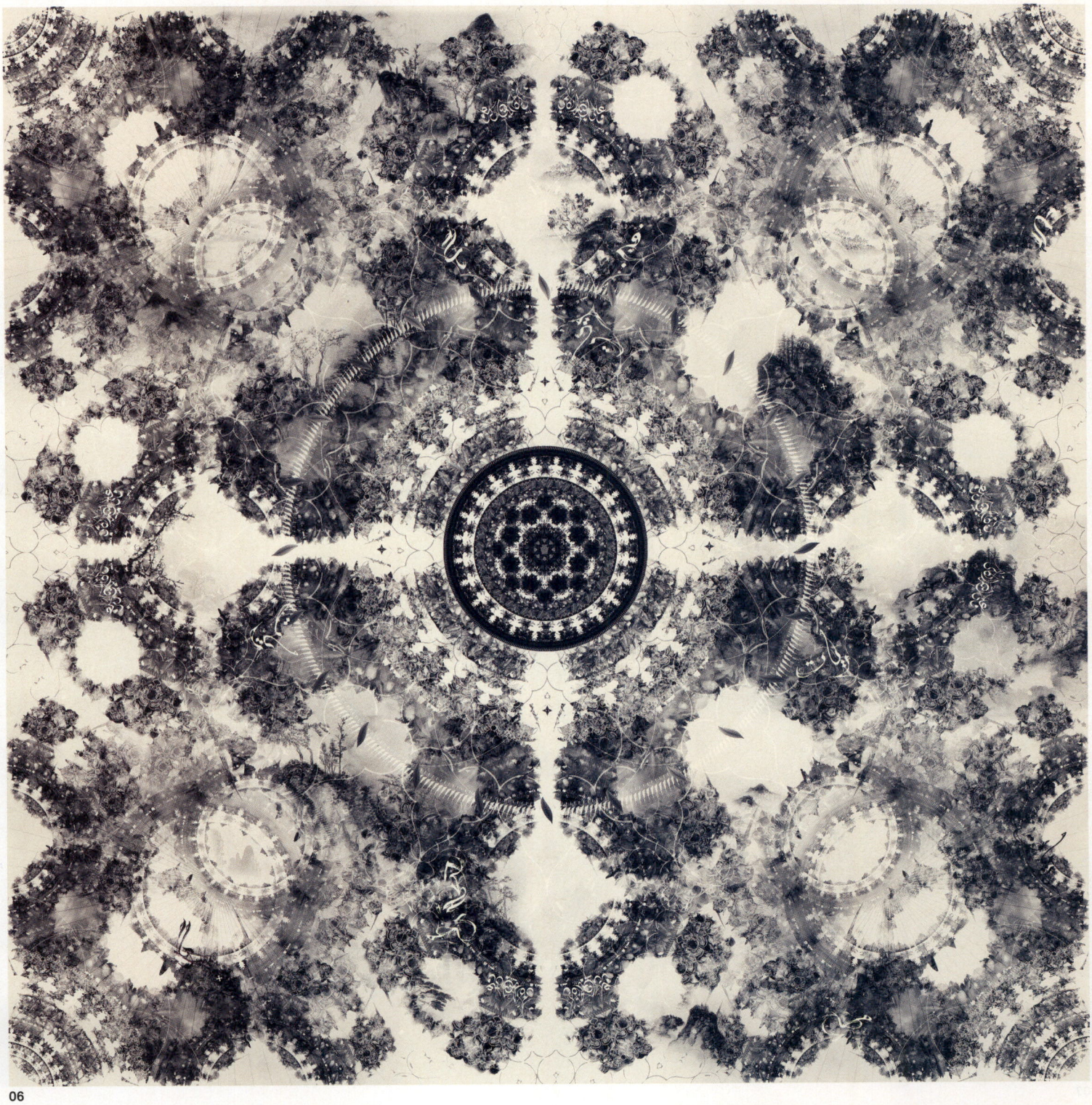
→ tribute to the women of the boycotted 1980 Moscow Olympic Games. Each features a dazzling Japanese Ikebana flower arrangement, anchored to a silhouette of the sneaker. "I'd never really achieved a piece like this before, so I learnt a lot while I was [working] on it," he says. "The deadline was rushed and I had just a couple of weeks to produce the whole thing; it wasn't the most comfortable position to experiment with something new. They loved the pieces though, and decided to make them a print campaign, with the pieces in the store and in major streetwear magazines in Europe."

Trahand's flexible style and technique means he can easily adapt between one project and another. Having reduced his working space to just his laptop – "I only need a few squared inches of a desk and a quiet room, and I'm all set" – he's also able to move freely, and has split his time between his birthplace France, New York and Washington DC in recent years. It's an enviable position for an illustrator, and has enabled Trahand to become involved in a wide variety of projects. "I've worked with ad agencies, publishers, labels, major brands for print, television and web – really different profiles," he says. "My source of income keeps on changing."

His workflow, however, remains the same. "My process is 100 per cent digital. I usually produce pretty advanced sketches – quite close to final. It's difficult for me to give a good idea to a client about what they can expect without putting in a good amount of work first," he explains. "I go



06

through repeated rounds of exchanges of ideas with the client before I can get to work, so I'm sure we're on the same page."

Operating entirely within Photoshop, Trahand creates most of his work using the Image Adjustment tools, layers and masks. "Photoshop has become like an extension of me. I don't really think about how I do things, I just do them," he says, before admitting that – to the great amusement of friends – he prefers the Lasso tool to the Pen tool: "I use very simple tools," he shrugs. "It's more about patience and attention to detail. What makes my montages look more complicated is the time I spend on each element, making sure everything's in the right place and has the right treatment and definition."

Finding a balance between surrealism and "not going too far" is an ongoing challenge for Trahand. His pitch for US rapper Asher Roth is a good case in point: briefed to create a selection of surreal photomontages expressing a 'summer in NYC', he concentrated on keeping the piece fun, but light and easy. "Achieving that balance was the major difficulty," he confesses. "I played a lot with the light and definition on the different elements, until we were all comfortable with the piece. I wanted something that felt integrated since we shot Asher in the studio, so I spent quite a bit of time on according Asher to the environment."

His collaboration with G-Shock for French magazine *Graffiti Arts* also took a few attempts to achieve the right balance. With no precise brief other than to "express the concepts of solidity, robustness and resistance to time," and a glowing reference to his Onitsuka Tiger pieces, Trahand →

07 This 2010 personal illustration, **'Cream'**, is typical of Trahand's photomontage style, combining various elements with beautiful light treatments

08 Commissioned by the KDU, **'You Are Me'** is a piece typical of Trahand's portfolio. "Technically, I have a very personal focus on the balance of shapes and colours," he says

09 Trahand has designed the cover art of many of rapper Fisto's albums. This illustration, **'Futur Vintage'** is a good case in point

07

→ decided again to use his flowers, this time to express the idea of time. "They are so ephemeral and fragile that the contrast with the watch was a good way to express the idea of robustness," he explains.

It wasn't a complicated piece, but did require a certain amount of patience and experimentation to achieve the right level of ornamentation. "I produced a first work that was rejected because the colours weren't flashy enough, and expressed more of an autumn feel," he says. "I had to go against my personal taste and come up with much more vibrant versions." It definitely worked: the final piece is a truly remarkable combination of dramatic light treatments and elaborate shapes.

At the time of writing, Trahand is busy finishing a mixtape cover for US rapper Donnis and wrapping up some projects for New York ad agencies. But what's next in the pipeline for the man behind Takeshi? "I've been non-stop working for as long as I can remember – mostly commercial gigs that I'm not always proud of artistically – and I need a change," he admits. "The future plan is to find a way to balance my time better between commercial creation and personal work." He grins: "I only need longer days."

Pro software skills: Photoshop

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Trahand's creative process tips

1 Gather your materials

"For a montage, my first step is generally to gather the elements from various sources – stock, web and so on – and retouch them individually so that they look clean and lush."

2 Compose and experiment

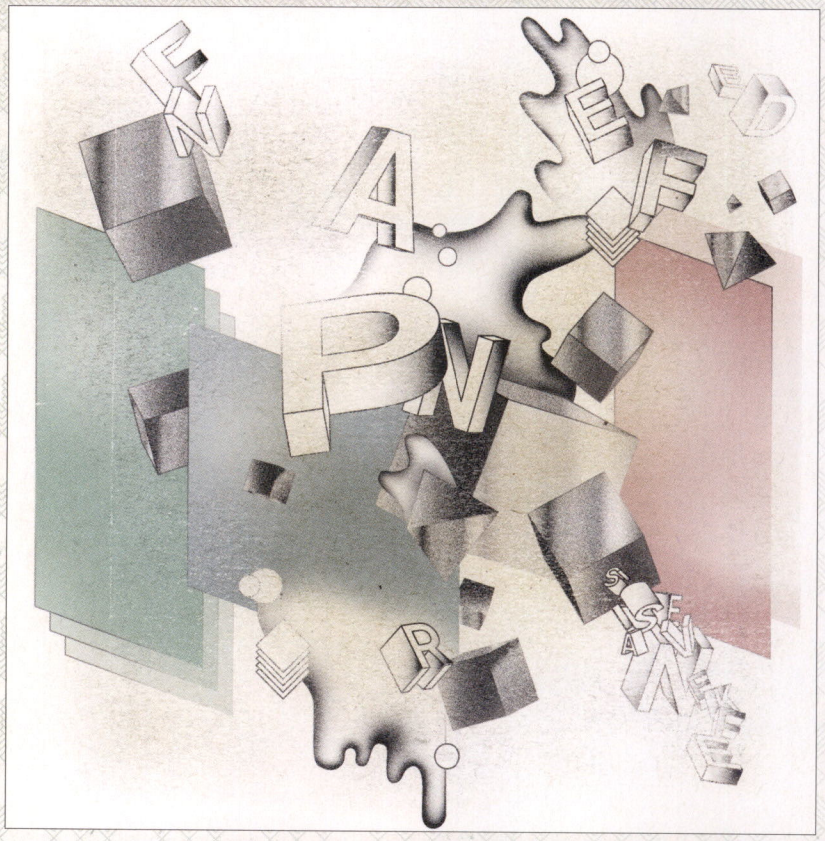
"I follow by creating a rough composition of the piece to get an idea of what it could look like, then start experimenting with different colour treatments."

3 Be precise

"Once I see where the piece could possibly go, I start composing things with precision, moving elements around until I'm happy with the general direction and energy of the piece."

4 Bring the light

"Once this is done, I'll work on the lights and shadows, and finish by making the colour treatments more subtle, also adding a few little details and corrections here and there."



DESIGN FOR WEB TOP 50

Design for online should both communicate and be easy on the eye. Here's how to ensure your Photoshop web work stands out

1 Be transparent

When you set Opacity of a layer using CSS or jQuery, the entire contents of the layer has its Opacity set – which is undesirable. Although CSS3 allows for background colours with alpha, an easier cross-browser approach is to save a transparent 24-bit PNG with Opacity dialed down to the appropriate level. All browsers after Internet Explorer 6 support these files without hacks, making it a good catch-all solution.

2 Add some grit

The web is full of fantastic free brushes for Photoshop that you can use to create unique, high-quality textured backgrounds and effects on your images. Rather than going for a straight-up solid background colour for your site, add some grit. Search for 'free Photoshop brushes', and fill your boots!

3 Go large

Increase the size at which font previews are shown in the Type menu by opening Preferences. Choose the Type tab and change Font Preview Size to Huge for a large preview instead of the default (mini) size.

4 Hold off on sharpening

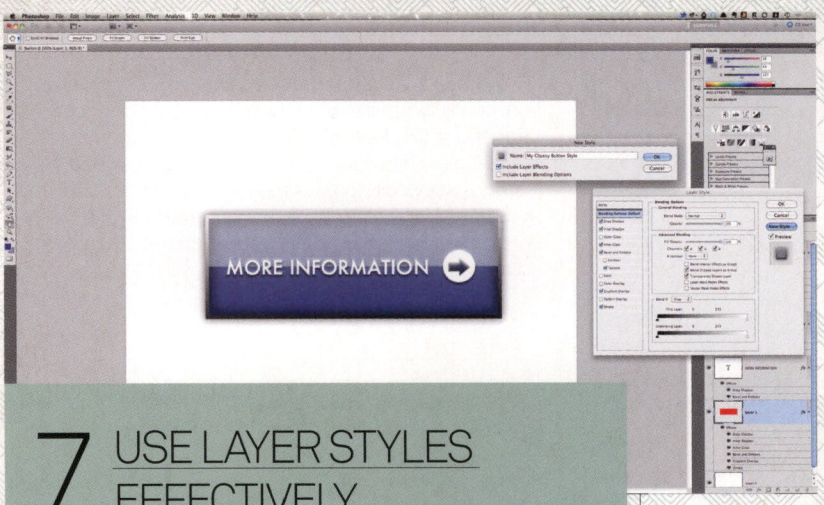
Print designers will know that apply sharpening is the final thing you should do to an image. The same is true for web designers, but whereas in print it's often advisable to over-sharpen slightly, on the web the opposite is true. Ideally, sharpen slightly less than you think you need to in order to get the most aesthetically pleasing output. The Unsharp Mask filter in Photoshop (Filters>Sharpen Unsharp Mask) is ideal for this.

5 Stick to your colour format

The source of many a frustration for web designers is matching colours between different file formats and CSS. Photoshop uses different colour spaces by default for GIF files and JPEGs. Your browser will use a different colour space again, leading to an apparent shift in colour between the three. Avoid this by choosing one format for an area, and sticking to it wherever possible. You can disable forced colour spaces by unchecking the 'Convert to sRGB' checkbox in Save for Web & Devices.

6 Build your colour profile

Various computers and monitors will all display colours differently, so something that you see as almost black may appear as a muddy brown or deep blue on an alternative computer. You can minimise the risk of this by creating a colour profile for your screen; do this through the Graphics options for your computer (under Control Panel on a PC, or System Preferences on a Mac).



7 USE LAYER STYLES EFFECTIVELY

One of the most useful tools in Photoshop is the Layer Styles function. Create a filled rectangle on a new layer and choose Layer>Layer Styles. Add a drop shadow, inner shadow, gradient overlay and inner bevel to create an instant polished button design without having to manually create each effect in turn. As these styles are live, you can edit them easily at any point. Save presets for future use by clicking on the New Style button.

8 Work in the same colour space

For consistent colour output, make sure that you always work in the same colour space. You can set the default colour space by choosing Edit>Colour Settings. You can accept the default sRGB, or opt for Adobe RGB if you prefer. While you're there, change the RGB setting under Colour Management Properties to 'Convert to working RGB' to ensure all images you place in RGB are converted automatically to the same colour space.

9 Behold: The Crop tool

The Crop tool is often overlooked, as you can make a selection and crop to it by just using Edit>Crop. However, if you're resizing many images for the web, using the Crop tool can save a lot of time. Select the tool and specify the desired width, height and resolution in the tool options bar. Once you accept a crop, Photoshop will also automatically resize and interpolate to output an image that's exactly to your specifications.

10 Take Actions

If you're performing the same task over and over to prepare images for a website, use Actions to record the steps you take in processing an image. Create a new action by pressing the Record button in the Actions panel, then process the image and stop the recording. Now you can select many files from Adobe Bridge and run your action on them to automate the process.

11 Layer Comps

One of the most useful features of recent versions of Photoshop is the Layer Comps function. Use this to mock up one core design with different variations and maintain all the iterations in a single file. This also makes light work of saving many different page mock-ups within an overall template. If you can't already see the Layer Comps panel, choose Window>Layer Comps to open it.

12 The Eyedropper is your friend

The Eyedropper tool in Photoshop will work anywhere on your screen, as long as you begin by clicking inside Photoshop but don't release your mouse button until you're over the area of colour you want to sample. This behaviour makes it a breeze to sample colours from images on a webpage, other Adobe applications or desktop icons.

13 FANCY DROP SHADOWS

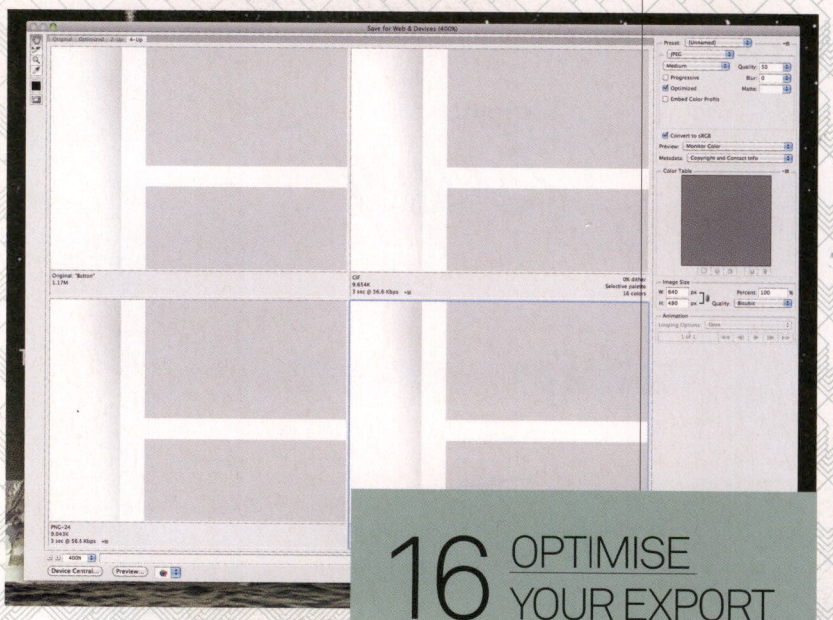
Regular drop shadows can now be rendered in many browsers using plain CSS, but fancy drop shadows can't. Create a regular drop shadow, then Right/Ctrl-click on the layer style and choose Create Layer. Select the drop shadow layer and choose Edit>Transform>Warp. Drag the centre of each edge in to create the illusion that the layer above has corners that are curling away from the page. For resizable versions of this, use a regular nine-slice approach (one graphic for the top left corner, one for the top right and so on).

14 Feed into the grid

Make use of Photoshop's support for grids and guides. Set up a basic grid that adheres to the 960-pixel standard by visiting Photoshop's Preferences and clicking on the Guides, Grids and Slices tab. Set the gridline interval to 24 pixels (or 32 or 48, as appropriate) and click OK. Choose View>Show>Grid to turn this on and off as required. To force layers to align to the grid, choose View>Snap To>Grid.

15 Join the groups

When you're working on a complicated design, it can quickly become difficult and confusing keeping on top of all the layers in your file. You can organise your file quickly and easily by arranging your layers into groups. Select the layers you wish to group, then click on the fly-out menu from the Layers panel and choose New Group from Selected Layers.



16 OPTIMISE YOUR EXPORT SETTINGS

Although it's a little archaic, you can still often get the best size:quality ratio by opting for GIF as your export format. Where you don't need variable transparency, and the artwork is largely flat colour, GIF can save you valuable kilobytes. Use Photoshop's 4-Up view to compare different formats, and remember that JPEGs are generally better for gradients and photos while PNG and GIF are optimised for flat colours. View at 400% or more to see the artifacts your compression will create.

17 Align tools

For pixel-perfect alignment of objects, use the Align tools in the Control panel. These only show up when you have the Move tool selected (shortcut key: V) and will be disabled until you select more than one layer. Once you've selected multiple layers, you can quickly align or distribute your layers with the different options provided, saving valuable time.

18 Make the Layers panel work harder

Avoid eye strain by making the CS4 Layers panel work harder for you. Open the fly-out menu and choose Panel Options from the list. Set the thumbnail size to the largest option, upgrading your Layer panel to a more useful preview of the layer contents. If desired, you can also set the thumbnail to only show the layer contents rather than the layer within the overall dimensions of the image.

19 Isolate your layers

You can isolate individual layers for examination easily by holding down Alt/Opt and clicking on a particular layer's eye icon in the Layers panel. This will temporarily turn off all other layers' visibility, enabling you to copy and paste into a new document using the Copy All Visible shortcut (Cmd/Ctrl+Shift+C). Alt/Opt+click on the eye icon again to return to the previous state.

20 Convert to Smart Objects

Save reworks and keep a back-up copy of your original assets at the same time by converting all your artwork to Smart Objects wherever possible. To convert a layer to a Smart Object, Right/Ctrl-click on the layer in the Layers panel and choose 'Convert to Smart Object'. Now any filters you add to this layer will be editable at any time in the future, and if you need to swap out elements you can simply edit the contents of the Smart Object.

21 Take snapshots

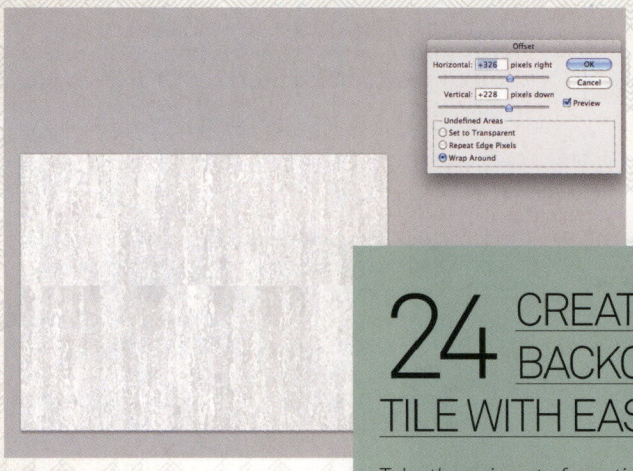
If you're experimenting with your design, it can be tempting to save lots of versions as you go, enabling you to return to an earlier version if your experiment doesn't work out. You don't need to save a copy of the document to an additional file – instead take regular history snapshots. This also helps you to see where you've been.

22 Get Kuler

Since Photoshop CS4, Kuler (Adobe's excellent online colour palette tool) has been available as an extension to Photoshop. In fact, it's there on your installation if you're using CS4 or above. To activate the panel if it isn't already visible, choose Window>Extensions>Kuler.

23 Snap wisely

Snapping can be a really useful way to ensure that your layers and elements align correctly in Photoshop, but if you've got the wrong options checked it can actually prove to be more of a hindrance than a help. Check your snapping options by choosing View>Snap To and deselecting any options you don't require (such as Layers, Slices and document bounds).



24 CREATE A BACKGROUND TILE WITH EASE

Take the pain out of creating a repeating background tiles. Create your texture at whatever size will suit your project, then choose Filter>Other>Offset. Offset approximately half the width of your image, and half the height. This will bring the edges to the centre of the image, leaving what was at the centre at the edges. Use the Clone Stamp tool to patch over the joins, and then save. If you want to check the seams, run the Offset filter again.

25 Revert to type

Although much of the typography you create in Photoshop can now be rendered in HTML thanks to the likes of Google Fonts and Typekit, that doesn't mean you don't have to mock type up in Photoshop. To ensure consistent results when converting to an HTML template, use common, rounded sizes, for example 12pt rather than 12.72pt.

26 Locate the Animation panel

Those who can recall ImageReady might remember the Animation panel fondly. Well, good news: it's now fully integrated inside Photoshop, so if you want to create an animated GIF or apply some selective editing of a video for the web, enable the Animation panel by choosing Window>Animation.

27 Turn up the noise

If your artwork is looking flat, one quick solution is to add some noise. You can do this universally to your whole design by adding a new layer and filling it with 50% grey. Set the blending mode to Overlay, then choose Filter>Noise>Add Noise. You can now dial down the opacity if the effect is too great, or apply additional layers of noise to further define your design.

28 Don't forget your Curves

Give your site a movie look by using a Curves Adjustment Layer at the top of your layer stack. Choose the Blue channel and drag the centre of the curve up 10-20%. Balance your change by offsetting the red and green channels by half the change each, and pulling the curve in the opposite direction. Other colour casts create different moods, so consider what might work best for your particular web page.

29 Batch your tasks

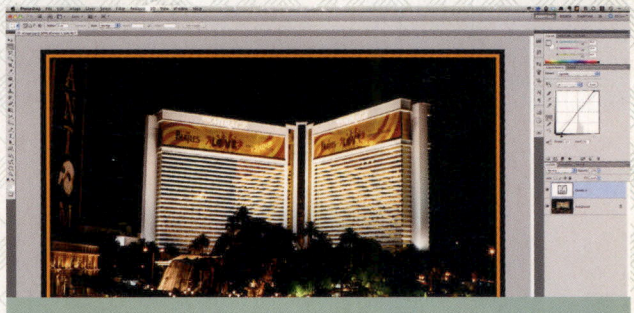
Have to resize 100 images for a new website? Don't do them one at a time! Record an action of the first one, then choose File>Automate>Batch to get Photoshop to churn through the rest for you automatically.

30 Depth of field

Create depth of field by separating elements out into different planes, then applying Gaussian or Lens blur to the layers furthest away from the viewpoint. This works especially well if you have isolated objects or portraits, but can work for repeating motifs too. Experiment with the concept of depth-of-field to add new depth to your design.

31 Add frosting

Create a frosted panel by saving two versions of the same background graphic – one straight up and the second with an additional layer, filled with white and set to 70% opacity. Next, add a Gaussian blur to the background. When you position one background over the other, you'll get the appearance of a frosted window.



32 MAKE YOUR IMAGES POP

If you're faced with client-supplied images that don't have much 'pop', there's a quick and easy way to increase the colour saturation without losing the luminance values. Convert your image to Lab mode (Image>Mode>Lab) then add a Curves Adjustment Layer. Choose the 'A' channel and bring the In and Out points in on the horizontal axis. Repeat for the 'B' channel and convert back to RGB. Add a regular S-curves Curves Adjustment Layer to increase contrast as required.

33 Font backgrounds

Web typography has taken off in a big way, but there are still many fonts that aren't legally available for use on the web. In these cases, don't be scared to use the tried-and-tested background image replacement technique – especially for custom or highly decorative fonts where the end result is almost illustration-like. →

34 BRING POLAROID EFFECTS INTO PLAY

Create a clean Polaroid-style effect for your images with a simple set of layer styles saved as a preset. Open your image and crop, including a little extra image along each edge. Add a Stroke layer style set to white, inside and 10px. Add an inner glow set to black, Multiply and increase the size to create a vignette. Drop shadow, bevel and emboss with texture, and inner shadow set to Normal blending mode and white will enable you to create the entire look using just layer styles. Save as a preset for easy future use.

35 Light the way

Use light and shade to help guide the viewer around your design. Photoshop offers a whole host of tools to enable you to paint with light, so get rendering lighting effects to illuminate calls-to-action, or add a flare behind your navigation to show the currently highlighted page. Get creative, but try to bear in mind the semantics of it all – use the contrast between light and dark to draw attention to the areas that you particularly want to highlight.

36 Reflect on it

Reflections are a bit passé (along with heavy drop shadows and glossy buttons) but if you absolutely must, duplicate your layer then choose Edit>Transform>Flip Vertical. Reposition the duplicate layer so that it aligns with the bottom of the existing layer. Use a Layer Mask with a black-to-white gradient to obscure most of the reflection. Reduce the opacity as necessary.

37 Suite up

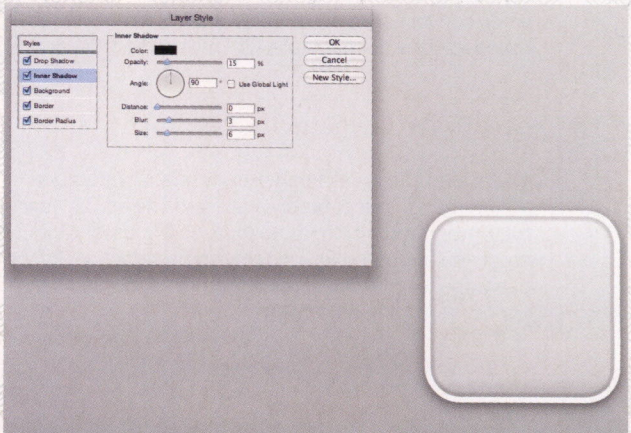
Use the full Creative Suite where it's more appropriate to do so. For example, if you're planning to create a vector-based element or illustration as part of the design process, you'll have a better set of vector tools available by switching over to Illustrator. All the software in the Adobe Creative Suite is designed to integrate nicely, so be sure to choose the right tool for the job.

38 Mock it

Product mock-ups can be quickly and easily created by downloading blank product packaging mock-ups and superimposing your own artwork over the top. Numerous websites offer a whole host of ready-made PSD files for exactly this purpose, making that all-important call-to-action graphic all the easier to create. Try searching for 'PSD product box' to locate free templates.

39 Master the Magnetic Lasso tool

If you've got a recent version of Photoshop, you can achieve super-quick cutouts by using the Magnetic Lasso tool to create a rough selection around your object. Once you've created a selection, make a Layer Mask from it and then open the Masks panel. Make sure your mask is selected, then click on the Refine Mask button to access a set of specialised tools to make accurate masks based on edge details and contrast.

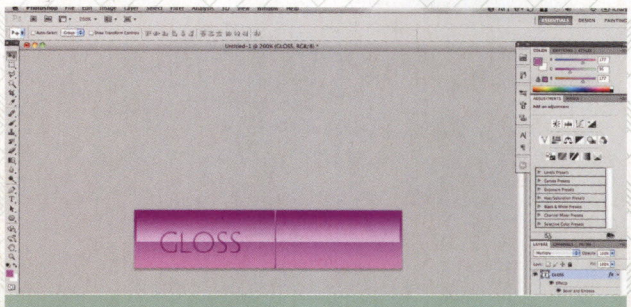


40 RENDER LAYER STYLES IN CSS3

Some layer styles can easily be rendered in CSS3, removing the need to output graphics from Photoshop altogether. Inner shadows, strokes, bevels and drop shadows can all be recreated using CSS3, which can save a lot of time maintaining graphics after the website has gone live. Just be wary of what older browsers such as Internet Explorer 7 and 8 will render - either provide a fallback with Photoshop-created graphics, or live with the progressive enhancement modern browsers enjoy. You can even use a Photoshop-like interface to generate the CSS (check out http://www.layerstyles.org/builder.html).

41 Know your rights

Assert your rights to your copyright by saving metadata with all of your images. Set up your default metadata profile by choosing File>File Info. Enter all the relevant data you'd like to save with your image, then click on the fly-out menu button and choose 'Save Metadata Template' (in more recent versions this function is accessed by choosing the Standard Copyright option at the bottom of the Metadata dialog). Apply this to each file you save to make sure your copyright is embedded into your output.



42 GO ALL-OUT GLOSSY

Glossy buttons and panels have never really gone out of fashion, despite the move to flatter, textured artwork from the height of glassy buttons associated with web 2.0. Create highlights and shadows quickly by Cmd/Ctrl+ clicking on the object you want to make glossy. On a new layer, fill your selection with a black-to-white gradient and set the blending mode to Overlay. Using the Marquee tool with Alt/Opt held down, remove the bottom half of the selection and add a further layer with a fresh gradient from white to black, then set this second layer to Screen and reduce the opacity to suit.

43 Work with Eazel

Adobe Labs continues to create new and innovative plug-ins and extensions for Photoshop. One such initiative is the Eazel app for iPad, which enables you to fingerpaint and import your artwork directly into Photoshop. This is a unique way of achieving organic-feeling artwork that would be difficult to replicate with a mouse and keyboard. Find out more at http://www.photoshop.com/products/mobile/eazel.

44 Replicate DOM

Arrange your layer groups and sub-groups into a pattern that replicates the HTML Document Object Model (DOM). This will make it easier to output and convert your mock-up into a working HTML file, and helps to keep everything organised nicely inside <header>s, <footers> and <articles>. This is especially useful if you're handing the file over to a coder to create the HTML template.

45 Be Content Aware

If an image isn't the right size or proportion for your design, make use of the Content Aware Scale and Content Aware Fill functions that have arrived in the latest versions of Photoshop. Content Aware Fill is found under the Edit>Fill option, while Content Aware Scale can be found directly in the Edit menu.

46 Size it up

It may sound painfully obvious, but check before you start work that you're generating assets at the right size for output. Having to recreate an entire site design because you thought the client was targeting 800x600 but they're actually aiming at 1024x768 is not a good use of anyone's time. Remember that bitmap images don't scale up without losing quality.

47 Be resourceful

Don't feel obliged to spend your time creating your own templates – there are thousands of useful resources on the web, including core template PSDs that have custom grids and guides set up to make it easy for you to follow a grid-based layout. Create a folder on your computer with useful assets you can reuse to speed up your design process.

48 Keep it standard

Don't waste effort recreating standard browser user controls. There are a variety of free downloads on the web for form fields, which can save you some serious time. Grab a complete set of PSD files with form elements from Designer's Toolbox: http://www.designerstoolbox.com/designresources/elements/

49 Know your vectors

Wherever possible, use vector shape layers for areas of flat colour such as content backgrounds. This will enable you to easily change the colour, style and shape of these layers later without having to mess with locking layer transparency, and guarantees you the best quality at export time.

50 Be old-school

Although it feels old-fashioned, slicing a design using the Slice tool and outputting some basic HTML using Photoshop's Save for Web & Devices function can quickly provide a workable framework for your final HTML template development. Don't be scared to use Photoshop's auto-generated code, but ensure you set the Output mode to Divs and CSS rather than tables!

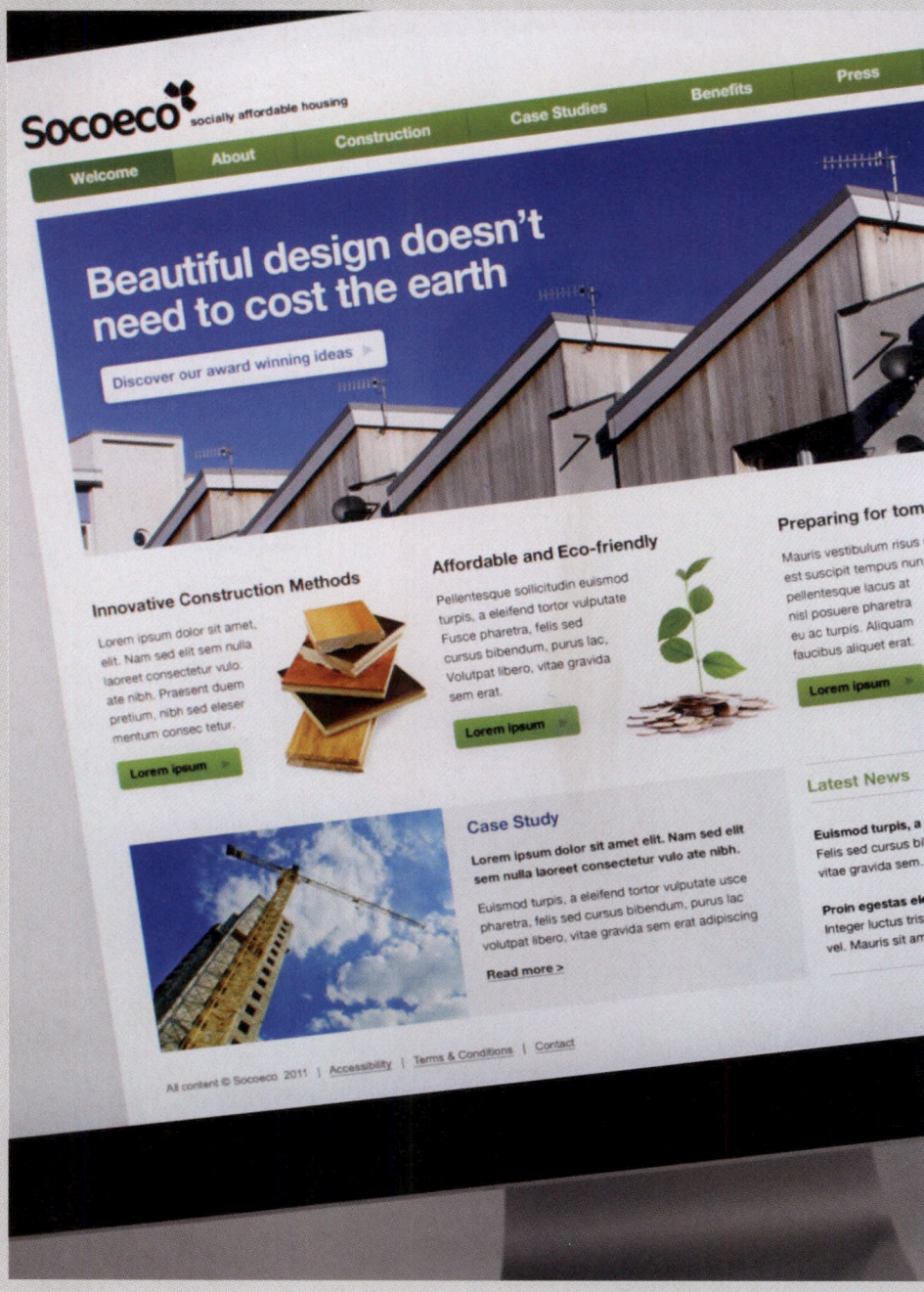
Photoshop CS4 or later

Designing website mock-ups

John Murray describes how Photoshop can help you glide through the early stages of creating work for online

The initial stages of designing a new website can be a very tough process. Clients inevitably only see the lovely designs placed in front of them and not the hard-fought process of getting to that point. Every designer has, at one stage or another, found themselves in a situation where they are just pushing pixels around the page, unable to break the back of a project or with a client that simply doesn't like what they've produced.

Like many things, designing a site is a systematic process, and by getting a tried-and-trusted procedure in place you'll ensure a smooth and ergonomic workflow. Here, using a fictional eco building company as an example, I'll be looking at some of the techniques I use when creating a site mock-up, which help ease the creative process and ensure client sign off every time.


Socoeco
socially affordable housing
Welcome
About
Construction
Case Studies
Benefits
Press
Beautiful design doesn't need to cost the earth
Discover our award winning ideas
Innovative Construction Methods
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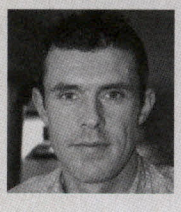
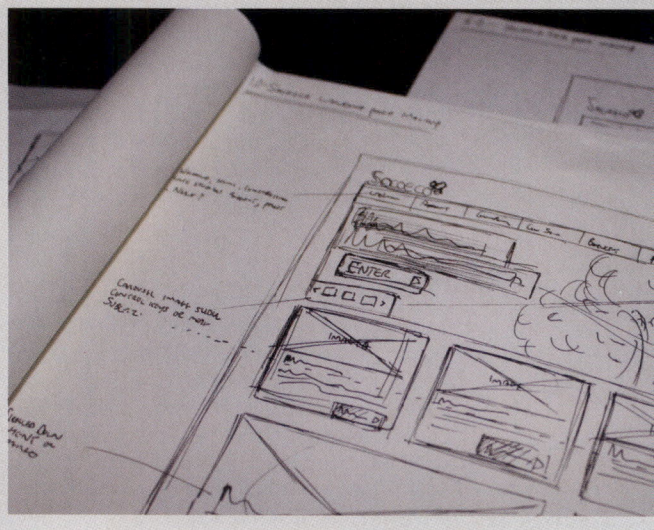


John Murray
John is the creative director of London-based digital agency Charm, which specialises in web design and build, digital advertising and infographics for clients including Coca-Cola, Warner and Royal Mail.
www.charm.co.uk

Time needed
4+ hours

Skills
- Wireframing and preparation
- Smart layers in Photoshop
- Grid systems and layout
- Presenting your work to the client

01 Starting with a good wireframe – regardless of how basic it is – makes the design process much more efficient. If you're doing this yourself, Illustrator is perfect – or good old-fashioned paper will do the job. The trick with wireframing is to keep it simple and avoid over-designing it. Remember that this is just the place where you are cementing the structure and user journey, so try not to worry about aligning things at this stage.



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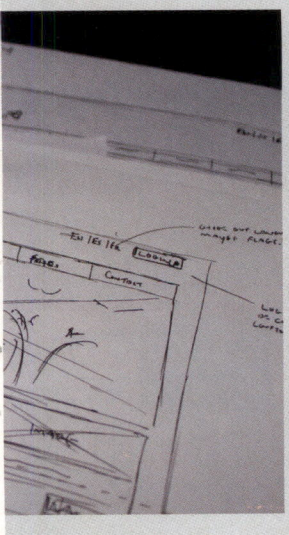
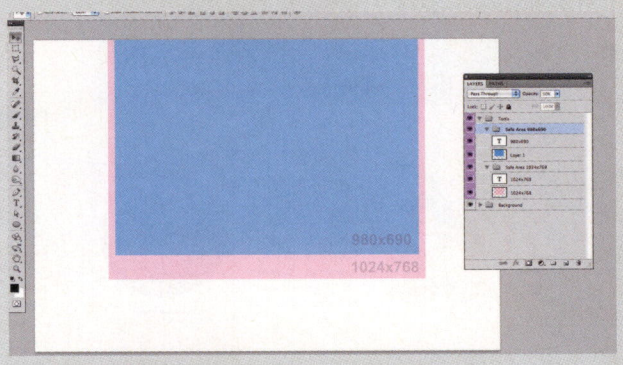
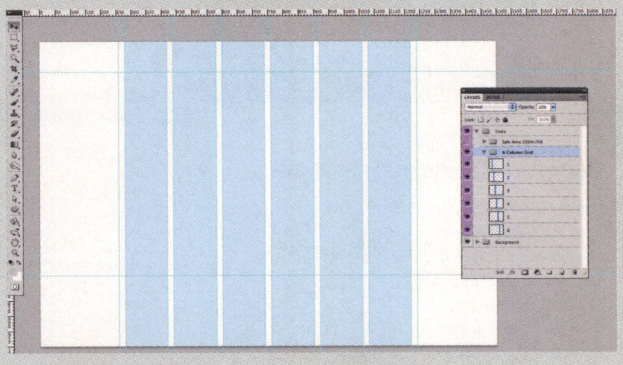


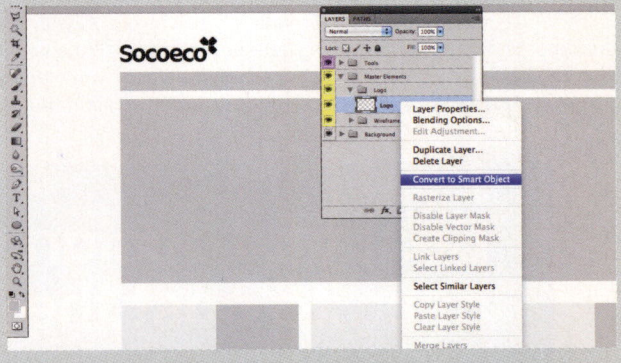


02 ___ 98.9% of people are viewing websites on a screen resolution of 1024x768px or higher, so it makes sense to optimise your design for this. This doesn't allow for the browser frame or tool bars either, so as a rule of thumb I try to work to a safe area of 980x690px. Your PSD can be bigger than this, but it helps to overlay a transparent rectangle of this size to use as a reference that can be switched on and off.

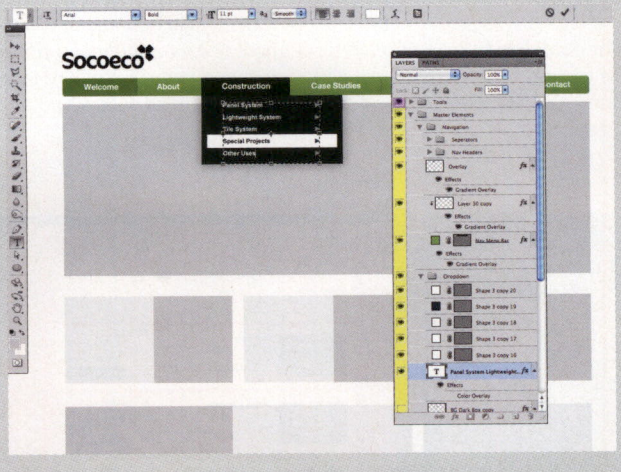


03 ___ Grids give structure to a design and keep things organised and clean. In this example I've used the Rectangle tool to draw out the shapes as overlays, then drawn my guides from these. I've opted for a six-column grid which enables more variables. Each column is 148px wide with a 20px gutter either side, so it fits exactly into my safe area of 980px.

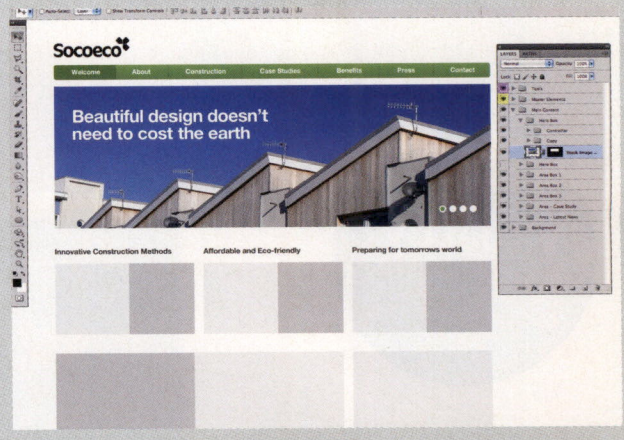
04 ___ A logo is the visual representation of what an organisation is all about. It's their identity (quite literally) and their public facing image, and tells us many things including their colour palette. It is, in effect, their moodboard, and in many cases it's the best place to start.



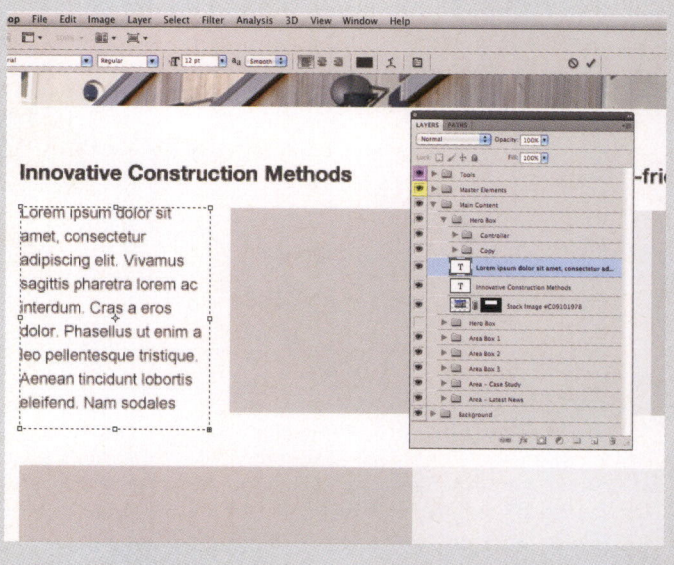
05 ___ Using Smart Objects is a form of non-destructive editing, enabling you to continually resize objects up or down without affecting their quality. You can create a Smart Object by pasting something from an outside program such as Illustrator, or by selecting some layers in Photoshop and clicking 'Convert to Smart Object'. It's a perfect tool at this stage as it enables minor tweaks if the client wants a logo slightly bigger (which they inevitably will!).



06 ___ The navigation bar is the single most important tool on any website, so its design and functionality should be well considered. Think about how the On and Off states will work in your design and, if you have a drop-down menu, how it will it function. You may also want to consider how to future-proof it in case the client wants to add another section later.



07 ___ Consider that everything on your page has a particular importance which needs to be communicated to the viewer. Using colour, size and position on the page as tools to show hierarchy will guide people to the content you want them to see first. Here I'm using a big hero image on a timed carousel, which will enable me to display a variety of messages to people as they land on the site. →


Innovative Construction Methods
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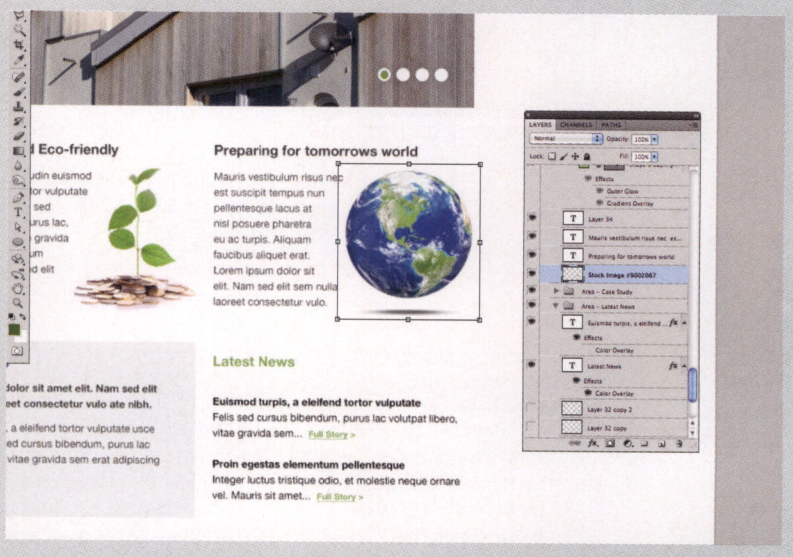
08 Use the Type Bounding box to insert your text, as this affords you more control if you need to make slight adjustments. To do this, select the Type tool and then drag it over your canvas. Make sure that body copy is written in web-safe fonts and that colour and size choices are decided with accessibility in mind. If you plan to use a tool like Google Web Fonts, try to keep its use to a minimum.



09 It's not always necessary to buy stock imagery until after client sign-off, so use watermarked versions instead. It's very easy to edit your images and forget where you got them from, so to save time searching again when you go to buy them, either use a separate assets folder outside Photoshop or label the layer with the image library and code. Layer masks are also very useful to avoid having to cut images up.

10 'Calls to action' are the buttons and links on a page that point people to the content you want them to see. Consider where these are and which are the most important. Try to keep your important calls to action above the 'fold' (the imaginary line that people have to scroll below to see content).

11 Insert any elements you plan to add to your design, such as the footer, login box, search box etc. If these are to be used throughout the site, you may want to keep them in a special folder within your Photoshop layers for easy access. These elements can be perfect for adding subtle flourishes to your design.

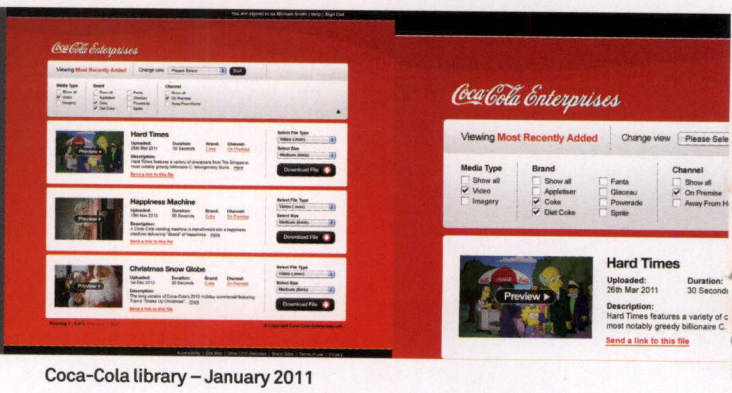
Visual CV

In pictures: a guide to the career and work of our Technique writers

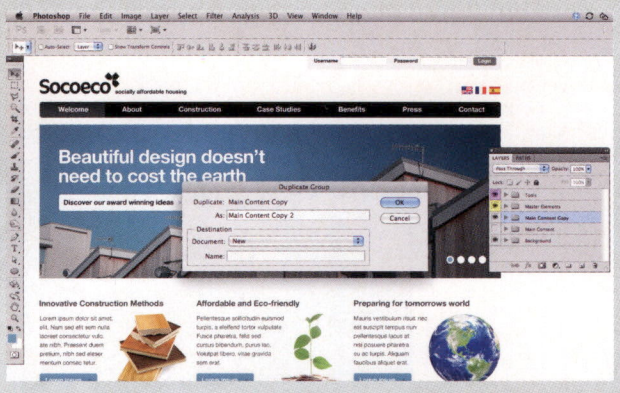
Charm

John Murray introduces some highlights from the agency portfolio

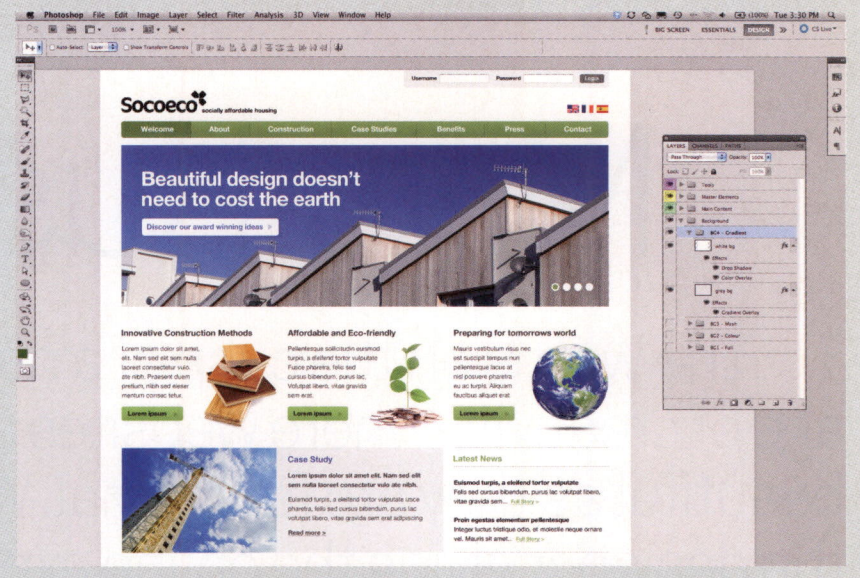
MPA Architects website – September 2010
Design and build of the WordPress-powered site.



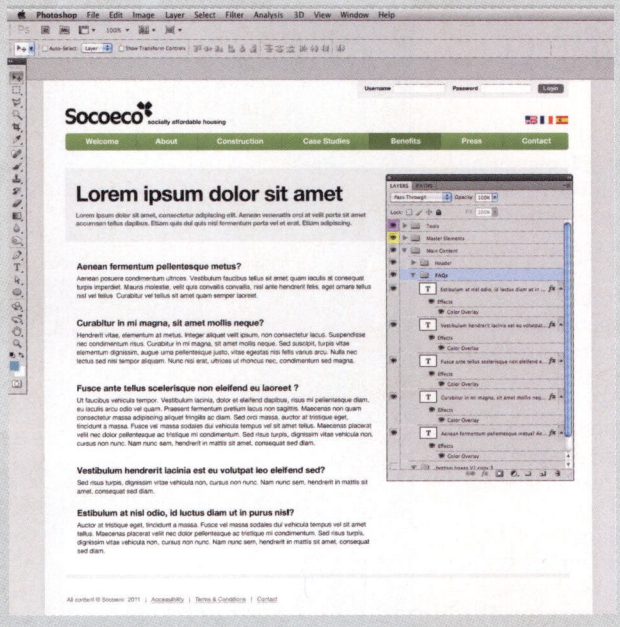
Coca-Cola library – January 2011
Design of the soft drinks company's online media library.



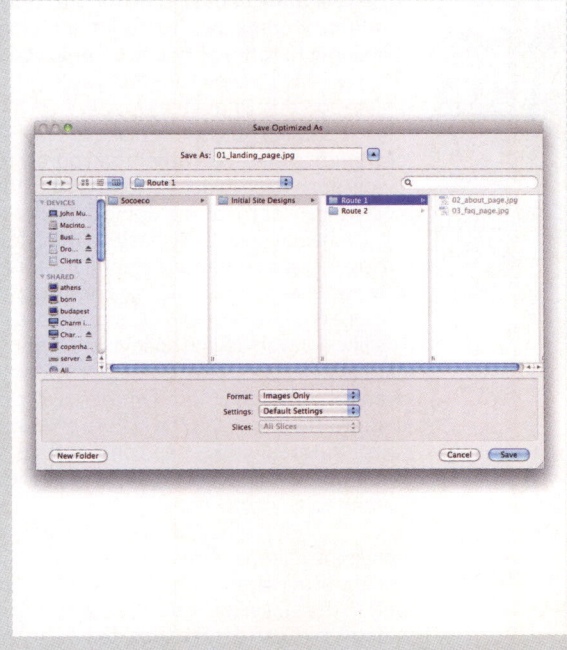
12 ___ Some of the best designs come from mistakes, and the only way to make mistakes is to try lots of new things. Tweak an element on your page and save a copy; duplicate layers or 'Save As' then go back – it's a great way to get variations on a design, and helps you to get out of a creative rut.



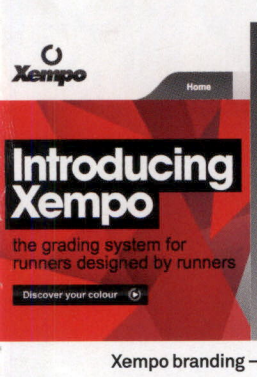
13 ___ There are lots of choices when it comes to deciding the best background for your design, and each one can dramatically change the look of the site. Whether it is colour, plain, gradient, dots, striped, mesh or photographic, it will all depend on what contrasts with your site. Try them all out – you may be surprised!



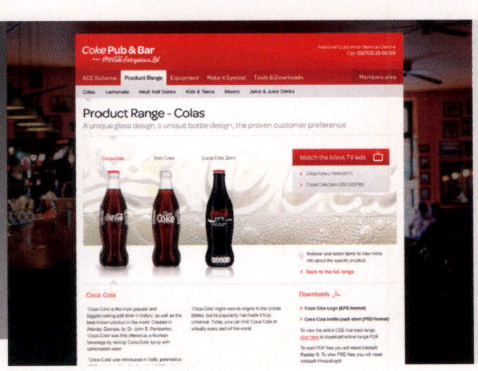
14 ___ Now you have your design, think how the other pages will look, and doing a second- or third-level page will show the versatility of your design. Try to make one of them very basic and heavy on copy, as your design needs to hold up when there aren't images colouring your page. Also consider showing the client at least one other completely new design route.



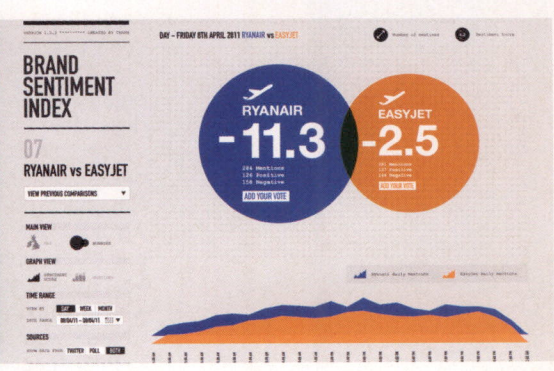
15 ___ Once you're done, save out JPEGs of your files before sending them to the client, and put them in a folder rather than just pasting them into your email. It's also good to name them numerically so that the client can see the sequence you intend them to be viewed in; 01_landing_page.jpg and 02_about_page.jpg will most probably be viewed in sequence, but without these numbers at the start they would more likely be viewed the other way round.



Xempo branding – April 2011
Brand identity and website design for new running clothing brand Xempo.



Coca-Cola website – May 2011
Design of the new Coke Pub & Bar website.



Charm internal project – Current
This interactive brand sentiment infographic pulls data from Twitter.

Mike Kus

The web is on the cusp of a new age of creativity, where websites are as beautiful as they are functional. We meet the designer giving the online experience a makeover with the help of Photoshop

Mike Kus
Designer Mike has recently opened his own design studio, with output covering illustration, graphics and web design as you've never seen it before. See more of Mike's work and read his blog at www.mikekus.com

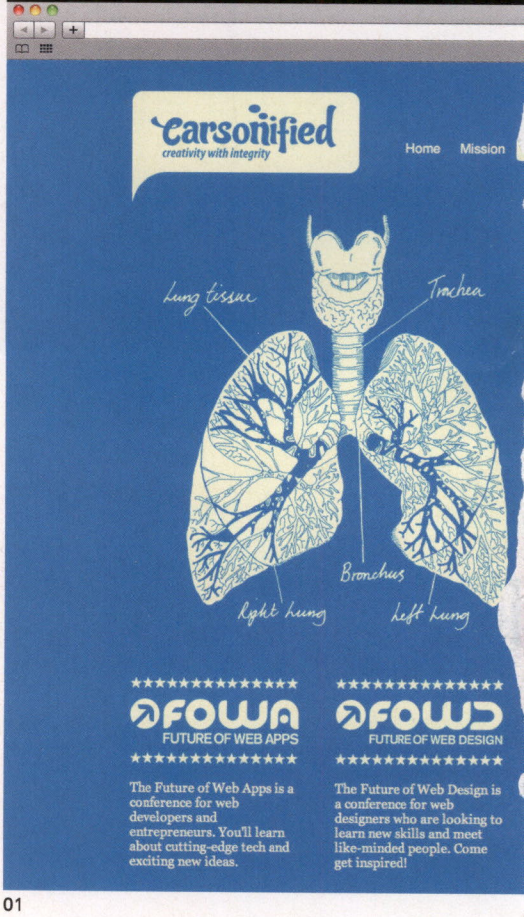
When we think of designing for the web, certain tools spring to mind, blinding us with their technological novelty, awesome functionality and complex code. Dreamweaver, Flash, HTML5 – these are the staples of creating stunning online content. Or are they?

Mike Kus is a web designer who approaches the craft from a creative, rather than purely techy, perspective. "I now specialise in design for the web but I come at it with everything I learnt as a graphic designer for print," he says, "which has been a really positive thing for me." From his base among the beautiful Georgian stone townhouses of Bath, Kus has leveraged his skills as an illustrator and graphic designer to produce visually impactful and attractive sites for the likes of web design specialists Carsonified (www.carsonified.com), Amazee Labs (www.amazeelabs.com), and events such as the Chirp Twitter developers' conference (http://chirp.twitter.com) and the Future of Web Design conference (http://futureofwebdesign.com). And the number one tool in Kus's web design toolkit, which made these striking sites so memorable? Photoshop.

"Photoshop has been my main tool since I started designing using a computer," says Kus. "I've always just used it in my own way though and not in a textbook kind of way. It's only in the last six months I've started using the Layer Style palette. I've also only just started using the vector drawing tools. I love Photoshop but I try to use its effects and filters as little as possible, as they can take the personality out of your work. Photoshop helps me realise my ideas rather than contribute to them."

Kus's path to designing for the web has been an organic one, with roots than can be traced back to the school days when a young Kus excelled in art classes. "After leaving school I did a one-year foundation course in 'General art and design'," he recalls. "Then in the following two years I did a BTEC National Diploma in Graphic Design. This was 1991 to '93, and we didn't really use computers – we used paint, marker pens and created physical design mock-ups using transparent acetate sheets and photocopiers. It was very old-school. There was a computer in the building but I was never really sure where it was! I love that I went through that experience though. To think that I spent two years full-time doing graphic design without a computer seems crazy, now."

A degree in Art & Related Art followed – "For some reason I wanted to get away from graphic design and get a →


carsonified
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Home
Mission
Lung tissue
Trachea
Bronchus
Right lung
Left lung
FOWA
FUTURE OF WEB APPS
The Future of Web Apps is a conference for web developers and entrepreneurs. You'll learn about cutting-edge tech and exciting new ideas.
FOWD
FUTURE OF WEB DESIGN
The Future of Web Design is a conference for web designers who are looking to learn new skills and meet like-minded people. Come get inspired!

01

01 Kus designed **Carsonified**'s fun, colourful and easy-to-navigate website (www.carsonified.com)

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ONLINE VIDEO TUTORIALS FOR WEB DESIGNERS & DEVELOPERS
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TOPICS LIKE: HTML5 CSS3 JQUERY+ MORE
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Ryan
Founder
Ryan loves web tech, coffee and movies. (Is it wrong to see The Matrix seven times at the cinema?) He's got a degree in Computer Science and is passionate about connecting and encouraging people - which is why he's passionate about running events for the web community. He loves his wife and can't believe he's a dad.
ryan@carsonified.com
Ryan on Twitter
Ryan
Gill
Greg
Jo
Keir
Lou
Mike
Tash
Trista
Will
Cat
Pete
Nick
Jim
Address:
19c Charles Street,
Bath BA1 1HX.
United Kingdom
Registered in England.
Company No. 5057020
Contact:
T: +44 1225 324 980
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WE LIVE & BREATHE FOR THE WEB COMMUNITY
We produce events that bring the web community together to learn, converse & connect.
We run world-wide events for web professionals. Our goal is to inspire and help you turn your ideas into a reality. No matter if you're a developer, designer or entrepreneur, we have an event for you.
Chirp
We've teamed up with Twitter to create Chirp - The Official Twitter Developers Conference. This is going to be a rather special event, so don't miss it!
ThinkVitamin ONLINE CONFERENCES
Think Vitamin Online Conferences are focused online tutorials that get straight to the detail so you can learn about the topics you need to know.
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WE BELIEVE
At Carsonified we believe in treating other people like we want to be treated: with friendliness, patience and respect. We believe that the web industry is one of the most exciting places in the world, and that it's an honor for us to connect, encourage and train that community through our events. We believe in being more creative than we need to be and having fun while we're at it.
Learn, converse, connect
Creativity with integrity
We believe in the power of the internet
Corpus Callosum
Brain Stem
We believe in love
We believe in each other
We have a voice
Address:
19c Charles Street,
Bath BA1 1HX.
United Kingdom
Registered in England.
Company No. 5057020
Contact:
T: +44 1225 324 980
E: hello@carsonified.com
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02-03 Kus's site for Swiss web agency **Amazee Labs** utilises print-like textures (www.amazeelabs.com)

04-05 A proud member of the **web design community**, Kus stays in touch with his peers and their work, exchanging and developing ideas: "I love that different designers solve similar problems in different ways. I think that's what makes our industry so interesting."

Amazee Labs
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Community Solutions
Web Development
Web Consulting
Connecting your people
Creating your sites
Giving you insights
We are specialized in developing and running Community platforms. Whether you want to engage the world or simply connect your office staff online, we'll create the right solution, While you have a cold beer.
Functionality:
Our Community Solutions carry a wide load sign! We offer
When you call on us, we'll be at your side through all stages of the development process. Our product range comprises Social Media Applications, Websites, Campaining Tools, Webshops - you name it!
Conception:
Together, we'll analyse your needs and translate them into a
Over time, we've learned a lot working with clients and our own products. Naturally, we'd like to share our knowledge with you. Whether we've built your Website or you merely need the inside scoop on the web: It's our Know-How that make thing work.
Technology:
Even the most social Media are made of Bits and Bytes. We help
02

03

04

→ bit more freeform" – before Kus landed his first job, fresh from removing his mortarboard, as a graphic designer with The Body Shop, where he was introduced to the tools that would help him build his career: "This was there I got my first experience with a Mac and Photoshop. They stuck me on a two-day crash course in Photoshop and then I developed skills on the job."

From The Body Shop's design department, Kus honed his design skills on high-profile campaigns that had an international aid message as well as a commercial one. "The first piece of work I was really proud of (that I can remember) was a 'Values Campaign' for The Body Shop," Kus remembers. "It was designing window posters and other in-store graphics to promote the work The Body Shop was doing in Cabra, Kosovo. They were raising money to build a school there. The posters were in every Body Shop window in the country, which was pretty exciting. I had to produce some giant graphics for the Oxford Street store windows, and after the project was complete I went to see my work on display there. That was a nice moment. It was the first time I felt like a real designer."

Of course, since that time the internet has changed the way we both communicate and consume, and so, says Kus, "my work has developed massively over the years. I'm always learning new things, and with more knowledge comes new approaches to my work. Also, four years ago decided to learn front-end web development. I felt that as a modern graphic designer I needed to know how to design and build websites. This changed everything for me."

Stand-out recent projects include the design of the Amazee Labs website, which is a rarity in that it displays a hand-crafted aesthetic online, with print-effect images and characterful fonts. "It was a great web project because I had creative freedom to express the company's values and →

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BRIGHT
DRUPAL
HTML5
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CRAFTED
FRESH
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web: It's our
work.
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@amazee on Twitter
We realeased a new version of Amazee this morning!
It's a lot quicker now! http://www.amazee.com
Zoom in! *MM

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Making Your Web Work
Amazee Labs
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Services
Clients
Contact
Newsletter
Gregory Gerhardt
Strategy & Concept Guru, Founder
Before Gregory got eaten by the Web he studied Law and worked in management support at a Swiss private bank. With this background, he quickly understands the demands of sophisticated clients and knows how to translate the fiercest business challenges into web platforms. Gregory guides our team and makes sure everybody is comfortable and fully focused on conversion!
Fun fact:
Gregory is an avid windsurfer.
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Dania Gerhardt
Project Management Queen, Founder
Dania is our organizational talent, so naturally, we'll let her take the lead when it comes to managing the Labs' projects. She'll probably be your first contact when you come to Amazee Labs and she will most likely hand you the keys once your new Web home is ready! Before Amazee, she worked as an auditor and accounting consultant for an international auditing company.
Fun fact:
Dania has seen the sun rise on top of Mount Kilimanjaro.
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Michael Schmid
Tech Whiz Kid
Don't let his youngish appearance fool you: Michael's IT Kung Fu surpasses that of many elders of the trade with ease! Be it designing or programming, setting up scalable server infrastructures or simply giving easy-to-understand IT support, it all seems to come natural to Michael. He leads the Labs' Tech Department and will make sure that all of your wishes become a virtual reality!
Fun fact:
Michael was Swiss IT Champion in Network Technology in 2007.
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Mathias Möller
Text Musketeer
In another life, Mathias probably would have been a rapper. Whenever he can put something in words, he nails it. So, whatever texting works need be done, we'll leave you in his trusted hands. Also, if you should need a Community Manager, Mathias will be glad to put his diplomatic skills to the test. And the best thing about him: He is about as good in English as he is in his mother tongue, German!
Fun fact:
Mathias can (and will) lecture about popular music, if you don't stop him.
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Juanlu Nuñez
Programming Superman
When it comes to actually building your Website, Juanlu is your man! He knows all the nitty-gritty programming details of which we are almost completely oblivious (aside from a few simple HTML snippets). He never tires to give your site the best looking infrastructure possible. He may be the quiet type, but he sure knows how to code.
Fun fact:
Juanlu has worked as a voluntary math teacher in Latin America.
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Daniel Truninger
Product Development Striker
Nobody knows best-practices like Daniel does. He studies Websites like others study Buddhism: In depth and with determination. This way he contributes to the many innovative solutions we are offering our customers. Our product development relies on Daniel's usability tests and his finely-tuned mockups. He may be working behind the scenes, but you'll surely feel his influence in your product!
Fun fact:
Daniel played Handball for the Maltese national team.
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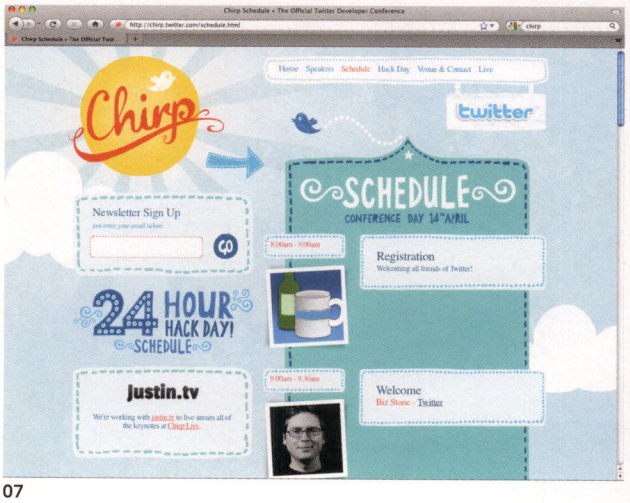
06-08 The **Twitter Chirp** conference website is a highlight in Kus's recent portfolio

09 The **craft aesthetic** plays a large part in the design of Kus's recent websites, setting them apart from the majority of their webfellows

06



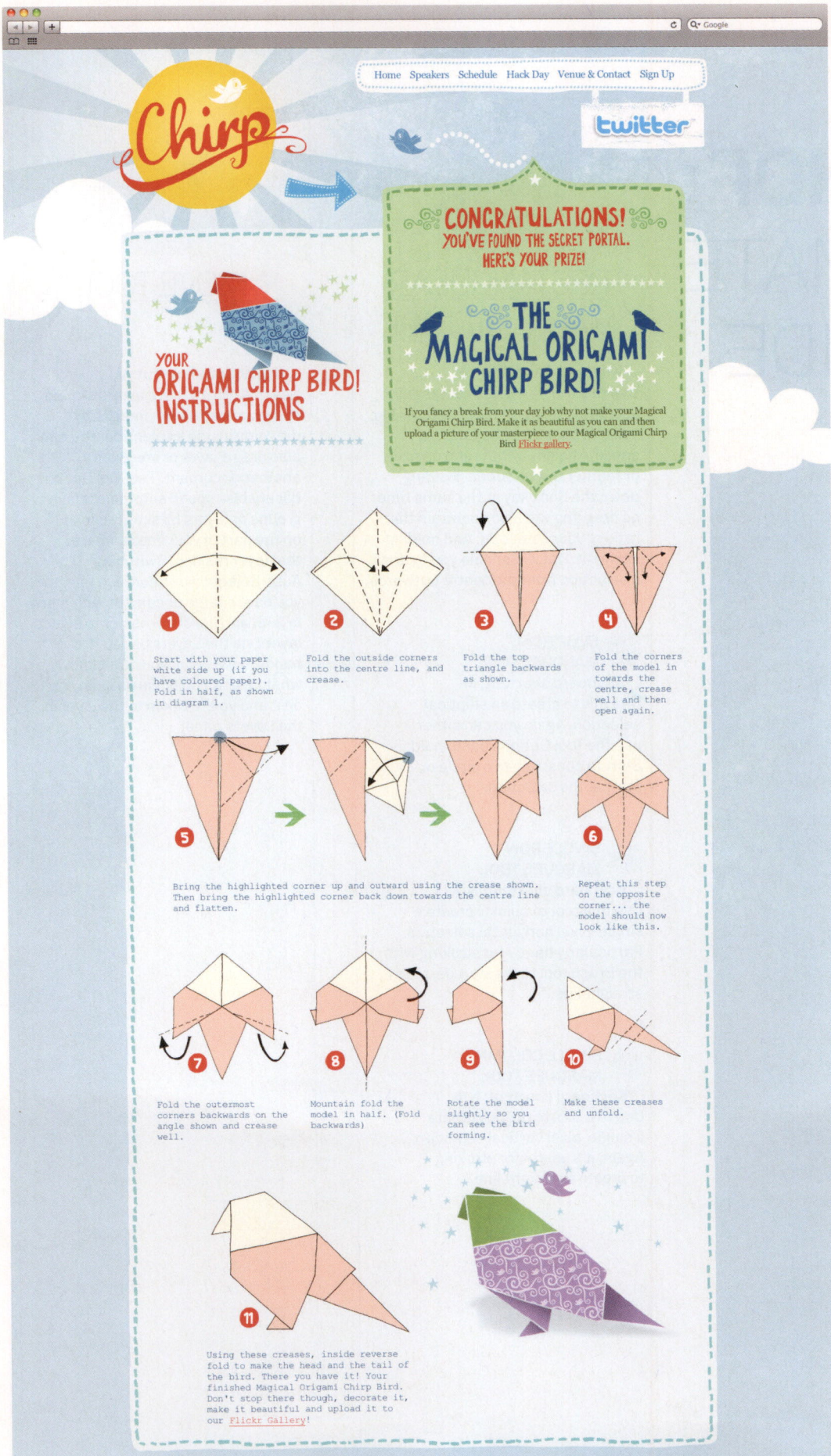
07

08

→ personality," says Kus of the site. "I took an illustrative approach to the visual design of the site, using hand-drawn elements which I then edited in Photoshop. I was pleased with the outcome because I think I found a good balance between form and function."

This balance is key to Kus's success – he produces sites that not only work but are a pleasure to view. The designer keeps his hand in with print design and illustration while he's working on sites, continuing to build a non-web portfolio that in turn feeds into his work for online. "I'm working on five or six projects at the moment, ranging from poster designs, an iPhone App, website designs and web app designs. I'm lucky that I get to work on a wide range of projects. The fact that I design for both web and print really helps with this. I get asked to do really creative stuff and also some really technical stuff. It's this broad range of work that keeps me interested and on my toes design-wise."

Kus has recently launched his own studio, which bodes well for the future of the web as a platform for beautiful design. "It's really important for web designers to be creative and inventive as possible," he says. "I think there are too many preconceptions of what a web design is and what websites should look like. This is sometimes a stumbling block to designers creating visually interesting and meaningful design. There are different considerations when designing for the web because you're designing an interactive experience and that experience needs to be good! But the functionality of a website doesn't need to be compromised in order to produce beautiful and meaningful visual design. It's just a matter of spending the time to get those two aspects of the design working together."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CONGRATULATIONS!
YOU'VE FOUND THE SECRET PORTAL.
HERE'S YOUR PRIZE!
THE MAGICAL ORIGAMI CHIRP BIRD!
If you fancy a break from your day job why not make your Magical Origami Chirp Bird. Make it as beautiful as you can and then upload a picture of your masterpiece to our Magical Origami Chirp Bird Flickr gallery.
YOUR ORIGAMI CHIRP BIRD! INSTRUCTIONS
1
Start with your paper white side up (if you have coloured paper). Fold in half, as shown in diagram 1.
2
Fold the outside corners into the centre line, and crease.
3
Fold the top triangle backwards as shown.
4
Fold the corners of the model in towards the centre, crease well and then open again.
5
Bring the highlighted corner up and outward using the crease shown. Then bring the highlighted corner back down towards the centre line and flatten.
6
Repeat this step on the opposite corner... the model should now look like this.
7
Fold the outermost corners backwards on the angle shown and crease well.
8
Mountain fold the model in half. (Fold backwards)
9
Rotate the model slightly so you can see the bird forming.
10
Make these creases and unfold.
11
Using these creases, inside reverse fold to make the head and the tail of the bird. There you have it! Your finished Magical Origami Chirp Bird. Don't stop there though, decorate it, make it beautiful and upload it to our Flickr Gallery!

Kus's top tips for Photoshop success

1 Own Photoshop

"Use Photoshop the way you want to use it. Spend some time experimenting, creating textures and assets that aren't learnt from a textbook or blog post. It can help you find an original style for your work."

2 Think retro

"To give your work an aged or retro look, overlay a yellow layer with the opacity set to around 5%."

3 Make Photoshop invisible

"Try to avoid using any obvious Photoshop filters or effects. Photoshop shouldn't be recognisable in your work. You don't want your work to look like a demo."

4 Button it

"When using drop shadows or highlighting on website buttons, keep it subtle."

5 Play with texture

"Use Photoshop with your own scanned-in textures and hand-drawn elements. This will also make your work more recognisably your own."

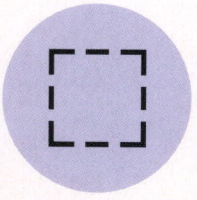
PHOTOSHOP: THE ULTIMATE TOOL GUIDE

Photoshop is a sprawling behemoth of an application. We don't need to tell you it has an incredible depth and breadth of features that can be used in image editing, illustration, animation or video workflows. The fact is, though, you probably haven't even used half the toolset Photoshop has to offer.

Over the following pages, we bring you the definitive guide to Photoshop's features, so you know the app inside out. It'll help you in your work and better prepare you for the tutorials on the previous pages of this book. It's not that we don't want you to experiment – quite the opposite, in fact: knowing where everything is and what it all does will hopefully inspire you to try out new tools and techniques in your artwork.

So read on and discover every tool, feature, filter and palette, what they do and how they can be used in your work. By the time you finish, you'll know Photoshop like the back of your hand – then it's time to put it all into practice with our huge range of tutorials. All the tools here are from Photoshop CS5, so you'll find your interface will differ slightly if you're using an older version.

The Tools panel is the heart of Photoshop. Here's what the tools are, what they do, how you can customise them using the Tool Options bar and how you can access them quickly. Remember, for most tools there is a tool 'flyout' enabling you to access more tools that are used for similar tasks.



RECTANGULAR MARQUEE TOOL

○ **Keyboard shortcut: M**

Use this tool to make a rectangular selection. Using the Tool Options bar, you can constrain the tool to a specific height/width ratio or size, or feather the selection. Holding down the Shift key at the same time as dragging will also constrain the ratio of your selection. And holding down Alt/Opt will enable you to draw a selection from the centre outwards.

ELLIPTICAL MARQUEE TOOL

○ **Keyboard shortcut: M**

Use this to create an elliptical selection. Again you can either use the Tool Options bar or hold Shift to constrain to a circle or feather the selection.

SINGLE ROW MARQUEE TOOL

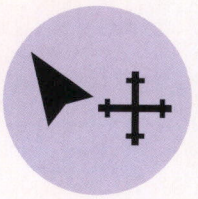
○ **Keyboard shortcut: N/A**

Use this tool to quickly create a single-pixel horizontal selection. Particularly handy for stroking with the Brush tool to create a perfectly straight line.

SINGLE COLUMN MARQUEE TOOL

○ **Keyboard shortcut: N/A**

Use this tool to quickly create a single-pixel vertical selection. Again, it's useful for stroking to create a straight line.



MOVE TOOL

○ **Keyboard shortcut: V**

Use this tool to move layers around and chop parts from images by dragging inside a selection. You can also drag a layer or image into another document. The Tool Options bar enables you to auto-select layer groups or layers by simply clicking on the part of your image where that layer resides. Switching Auto-Select on can confuse things if you have a large document with many layers, and it's often easier to select layers via the Layers panel. It is handy, however, if you don't know what layer an object is on. Just click on it and you're taken to the layer in the Layers panel.

LASSO TOOL

Keyboard shortcut: L
The Lasso tool can be used to make a freehand selection within your image: you simply click-and-drag to draw the selection. If you let go before completing your selection, it will draw a straight line from the beginning point to the point you let go. The Refine Edge tool in the Tool Options bar is particularly helpful when used in conjunction with this tool.

POLYGONAL LASSO TOOL

Keyboard shortcut: L
This tool enables you to freely create a straight-edged selection by means of clicking and moving your cursor to the next point. At any stage you can double-click to complete the selection; or when you hover over the point where you first clicked, a little circle will appear next to the cursor icon. This tool is best for selecting simple objects (or parts of objects) with straight edges.

MAGNETIC LASSO TOOL

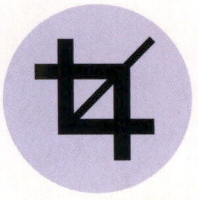
Keyboard shortcut: L
Like the main Lasso tool, but intelligently follows the edge of an object as you trace around it. You can adjust the contrast of the edge that the tool considers when you draw, as well as change the frequency at which the tool adds points (for tighter selections). In addition, you can specify a detection width – with the tool detecting edges only within the specified distance from the cursor. Finally, if you are using a graphics tablet, you can use the tablet pressure to change the pen's width. A great tip (which applies to many other tools, including the Brush) is you can show the selection width by hitting the Caps Lock key. This toggles between the normal cursor and the Width preview.

MAGIC WAND TOOL

Keyboard shortcut: W
The Magic Wand tool enables you to quickly make selections based on similarly coloured areas. It's useful for quickly (and roughly) knocking out a subject from a plain background, for instance. The Tool Options bar enables you to customise the tool, with the Tolerance field determining how closely it matches colours (the higher the tolerance, the larger the selection) and the Contiguous box ensuring the tool selects areas next to each other (rather than colours across the entire canvas). When checked, the Sample All Layers box enables you to select across all of your layers instead of just the one currently selected.

QUICK SELECTION TOOL

Keyboard shortcut: K
The Quick Selection tool takes a brush-based approach to selections, enabling you to essentially 'paint' a selection on your image. As you paint, the selection expands to automatically find edges. The Tool Options bar enables you to select across all layers, and the Auto Enhance checkbox smooths the selection (which you can further refine with the Refine Edge options).



CROP TOOL

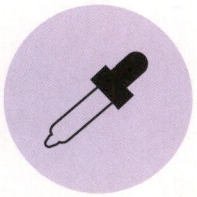
Keyboard shortcut: C
Use this to crop your image. Just click-and-drag on your canvas to create the crop area, which can then be refined by either double-clicking or hitting Return. The Tool Options bar here enables you to specify a custom width and/or height for your crop and the resolution of the cropped image. When you've dragged a crop area on your canvas, the Tool Options bar changes to reveal options for either hiding or deleting the cropped-out area, making changes to the grid that appears inside your cropped area, toggling between having a coloured and white area outside of your crop (check the Shield box), and also cropping with perspective.

SLICE TOOL

Keyboard shortcut: C
The Slice tool is used to create 'slices' of images for websites – literally slicing up your images so that they load faster in web browsers. When you click-and-drag to create a slice, Photoshop automatically creates the rest.

SLICE SELECT TOOL

Keyboard shortcut: C
With the Slice Select tool, you can select your slices for further editing. By using the Tool Options bar you can 'promote' slices to user-created slices, divide them and add elements such as target URLs to each one. When you 'Save for Web & Devices' from the File menu, the slices will be retained (you can specify how they are saved in the Save dialog).



EYEDROPPER TOOL

○ **Keyboard shortcut: I**
At its most basic, the Eyedropper tool can be used to sample or 'pick up' colours from your canvas. By clicking on a particular area, you can sample that colour and use it in the same document or another one. The colour appears in the main Tools panel as the foreground colour (holding down Alt/Opt makes it the background colour) and can, by double-clicking on it, be saved to the Swatches panel. The Tool Options bar on this tool controls the size of the sampling area (with larger areas being more of a representative value than a single-pixel reading) and which layers you sample from, and toggles the Sampling Ring the show the previous foreground colour plus the one being clicked). On a more advanced level, the Eyedropper tool, in conjunction with the Info panel, can be used to perform prepress checks such as ink limits and tonal range. You can add multiple sampling points by holding down the Shift key as you sample.

COLOUR SAMPLE TOOL

○ **Keyboard shortcut: I**
Its sole purpose is to sample colours from your image. Use it like the Eyedropper tool and get readouts of RGB or CMYK breakdowns (depending on your document's colour space) in the Info panel. Again, you can use the Tool Options bar to change the sample size of this tool as needed.

RULER TOOL

○ **Keyboard shortcut: I**
Enables you to measure from one point to another. Take the readout in the Info panel or record the measurement in the Measurement Log panel.

NOTE TOOL

○ **Keyboard shortcut: I**
Use this tool to create non-printable notes that you can add to your image to give advice or direction to other who will be working on it. You can, using the Tool Options bar, add the author's name, change the colour of the note, clear notes and open up the Notes panel (where you actually type your note). You can also open up the Notes panel by double-clicking on your note on the canvas. As you add notes, the one that is currently active has lines (like text) on it.

COUNT TOOL

○ **Keyboard shortcut: I**
Use this to count the number of objects in an image. You can record the measurement in the Measurement Log panel and change options such as the count group, colour of numbers on your canvas and the label point size.

SPOT HEALING BRUSH TOOL

○ **Keyboard shortcut: J**
The Spot Healing Brush tool can be a lifesaver when you need to quickly retouch a photo. Use it without sampling a source (like the Healing Brush tool and Clone Stamp tool), and just paint over the area or blemish you wish to retouch. Using the Tool Options bar, you can tweak settings including the blending mode, sampling across all layers and using the excellent Content Aware option for speedier and more natural results.

HEALING BRUSH TOOL

○ **Keyboard shortcut: J**
Like the Spot Healing Brush tool, the Healing Brush tool can be used to remove minor blemishes and small imperfections in your image. The difference is that you have to sample a source with this tool, using the Alt/Opt key to do so. The Tool Options bar enables you to change blending mode, choose between a sampled source and a pattern source (the latter being handy for subtly adding a texture to small parts of an image) and also enables you to ignore adjustment layers whilst healing and sampling across all layers.

PATCH TOOL

○ **Keyboard shortcut: J**
Similar to the Healing Brush tool, the Patch tool is a retouching tool that enables you to quickly sort minor blemishes in your images by selecting an area and blending it over another. When Source is selected in the Tool Options bar, drag your selection to the area from which you want to sample – when you release the mouse button, the originally selected area is patched with the sampled pixels. If Destination is selected, when you release the mouse button the area you have just dragged your selection to is patched.

RED EYE TOOL

○ **Keyboard shortcut: J**
Use this to quickly fix red eyes in photographs. Just click on the subject's pupils and adjust the settings (Pupil Size and Darken Amount) in the Tool Options bar accordingly.

BRUSH TOOL

○ **Keyboard shortcut: B**
One of the most versatile and used tools in Photoshop, the Brush tool can be used for anything from digital painting to subtle retouching. Using the Tool Options bar, you can control the shape, size, blending mode, opacity and flow of your brush, as well as set up pressure sensitivity when using a Wacom tablet. You can also access the main Brush panel from here.

PENCIL TOOL

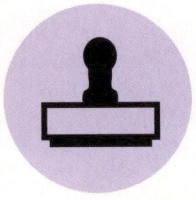
○ **Keyboard shortcut: B**
Use the Pencil tool to create natural media effects and Stroke selections for realistic, hard-edged lines. You can control the Pencil tool in exactly the same way as the Brush tool – via the palette, Tool Options bar or by Ctrl/Right-clicking on the canvas.

COLOUR REPLACEMENT TOOL

○ **Keyboard shortcut: B**
This is a tool for quickly overpainting colour onto an image. You simply choose a colour and brush size as normal, then paint over your image – the colour you specified replacing the colour you're painting over, but with all the image detail retained. The Tool Options bar enables you to change the brush, painting mode, limits and tolerance.

MIXER BRUSH TOOL

○ **Keyboard shortcut: B**
The Mixer Brush tool enables you to mix colours together for painting in a realistic way. Simply add a few colours to your canvas and start pushing them together as if they were on a paint palette. You can choose to load or clean your brush in the Tool Options bar, as well as change the wetness, flow and mixing properties.

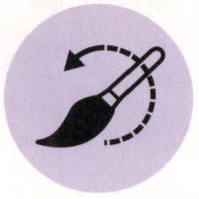


CLONE STAMP TOOL

○ **Keyboard shortcut: S**
An old Photoshop favourite, use this to quickly replace one area of an image with another. Simply Alt/Opt+click on the area you want to clone from, and then click again on the area you want to clone over. Simple. In the Tool Options bar you can change the brush, blending mode, opacity, flow and the layer(s) you sample from. You can also use multiple clone sources by using the Clone Source panel.

PATTERN STAMP TOOL

○ **Keyboard shortcut: S**
This simple tool enables you to stamp (or, essentially, paint) patterns on your images. Select a pattern from the Tool Options bar, choose a brush and size, and you're away. You can also alter blending modes, opacity and flow, as well as paint the pattern on with an Impressionist effect.

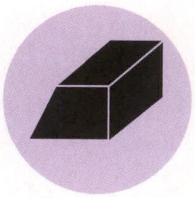


HISTORY BRUSH TOOL

○ **Keyboard shortcut: Y**
The History Brush tool enables you to paint your image back to a previous state – more specifically, back to a selected history state in the History panel. The Tool Options bar enables you to change brush size, blending mode, opacity and flow.

ART HISTORY BRUSH TOOL

○ **Keyboard shortcut: Y**
Similar to the History Brush but with a more artistic leaning, the Art History Brush enables you to paint back to a specified history state, adding an artistic effect chosen in the Tool Options bar. Interesting natural media effects can be generated by adding colour or texture over a photo, and then painting the photo back in with one of the artistic effects such as Dab, Loose Long or Tight Medium.



ERASER TOOL

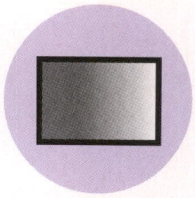
○ **Keyboard shortcut: E**
The Eraser tool doesn't just 'rub out' what you've drawn, it essentially acts as a brush that paints in the background colour specified in the Tools panel. In the Tool Options bar, you can specify a brush to use, the opacity, flow and also whether the Eraser erases back to a chosen history state in the History panel.

BACKGROUND ERASER TOOL

○ **Keyboard shortcut: E**
The Background Eraser is a good tool for quickly removing background colours from your images. When you start erasing, the tool samples the colour underneath the cursor, and as you click-and-drag removes any pixels that match the colour you originally sampled, making that part of your layer transparent. You can tweak brush size, hardness and so on, sampling limits and tolerance in the Tool Options bar. You can also choose to protect the current foreground colour.

MAGIC ERASER TOOL

○ **Keyboard shortcut: E**
Similar to the Background Eraser tool and the Magic Wand tool, the Magic Eraser enables you to quickly remove areas of an image with the same colour. Just click on the area and let Photoshop work its magic, tweaking the Tolerance in the Tool Options bar to get the right results.



GRADIENT TOOL

○ **Keyboard shortcut: G**
In its most basic form, the Gradient tool can be used to create blends from one colour to another. By clicking and dragging on your canvas, you create a gradient, specifying colour, style (Linear, Radial and so on) and blending mode in the Tool Options bar. The Dither option helps to reduce banding, blending your colours together more accurately.

PAINT BUCKET TOOL

○ **Keyboard shortcut: G**
The Paint Bucket tool can be used to fill areas in your images with flat colour or a pattern. Simply tweak the settings in the Tool Options bar (particularly the Tolerance settings), choose a colour or pattern and click where you want to fill.

BLUR TOOL

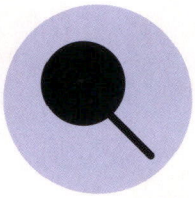
○ **Keyboard shortcut: N/A**
One of the simplest tools in Photoshop, this enables you to add blur to your photos or imagery – usually to add depth-of-field effects or tweak the focal point of your work. Simply use it like a brush, adjusting the size and strength in the Tool Options bar. You can also use some blending modes to achieve subtly different effects.

SHARPEN TOOL

○ **Keyboard shortcut: N/A**
The opposite of the Blur tool – but should be used with caution as you cannot simply resharpen a blurred image (that would involve Photoshop making up image data that simply isn't there). However, you can slightly sharpen artwork and photos with this tool. Use the Tool Options bar like the Blur tool, and experiment with the amount you sharpen.

SMUDGE TOOL

○ **Keyboard shortcut: N/A**
The Smudge tool can be used effectively to add artistic effects by pushing and pulling pixels, essentially like smudging charcoal. By clicking the Finger Painting option in the Tool Options bar, you can introduce the currently selected foreground colour.

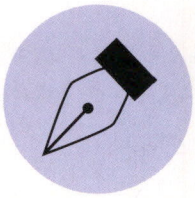


DODGE TOOL

○ **Keyboard shortcut: O**
The Dodge tool enables you to selectively lighten the pixels in your image, using a brush-based approach. Simply select the tool and specify in the Tool Options bar which areas of the image you want to affect (shadows, midtones or highlights), checking the Protect Tones button to stop the tool shifting the hue of your image. The Exposure setting controls the strength of the tool.

BURN TOOL
○ **Keyboard shortcut: O**
The opposite of the Dodge tool, the Burn tool enables you to darken areas of your image. Use it in the same way.

SPONGE TOOL
○ **Keyboard shortcut: O**
The Sponge tool enables you to control the colour saturation of your image using the same brush-based controls as the Dodge and Burn tools. Choose your brush and whether to saturate or desaturate your image, then begin painting, tweaking the flow as you go. The Vibrance checkbox – at least for colour correcting and retouching – should be left on as it gives a much more natural effect.



PEN TOOL

○ **Keyboard shortcut: P**
The Pen tool is used to draw paths and custom shapes. The first thing you do with this tool is check the Tool Options bar to make sure it's on the setting you want. If you want to draw a path that will be a selection (or simply a path to stroke with a colour), make sure the Paths option is checked. If you want to draw a vector shape with the tool, choose Shape Layers.

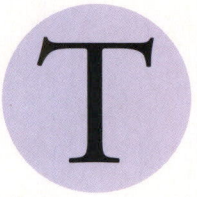
You can make paths from custom shapes and vice versa via the Layers and Paths panels, but it's easier to get it right from the beginning. When creating a path, you simply click once on your canvas, and then click again at the next point, building up your points around the area you wish to select. Holding down the mouse button and moving the cursor will enable you to tweak the path using Bézier tools; and the modifier keys (Shift, Alt/Opt) give you even more control over the direction of your path. The Tool Options bar enables you to add to and subtract from a path area, as well as switch between Pen tools (Freeform and Custom Shape) without going back to the Tools panel. After creating your path it appears in the Paths panel, where you can turn it into a selection, create a clipping path or modify it further.

FREEFORM PEN TOOL
Keyboard shortcut: P
Like the Pen tool, but instead of a Bézier curves approach it uses a freehand approach – which is particularly useful if you have a Wacom tablet. You can choose for the path to be magnetic, sticking to the edges of an area you wish to select (and of course you can go back and edit this path).

ADD ANCHOR POINT TOOL
Keyboard shortcut: N/A
This tool enables you to add points to your path for further editing. Just click on your path to add a point. There are no tool options for this tool.

DELETE ANCHOR POINT TOOL
Keyboard shortcut: N/A
The opposite to the Add Anchor Point tool, this tool enables you to delete points on your path that you don't need. Again, just click on the point.

CONVERT POINT TOOL
Keyboard shortcut: N/A
This tool enables you to edit the point and the path either side of it (as well as the nodes that are attached to the control point). Just click on the point or nodes you wish to edit, and drag. Useful for fine-tuning paths.



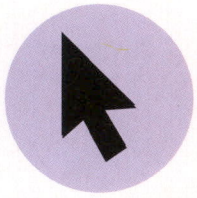
HORIZONTAL TYPE TOOL

○ **Keyboard shortcut: T**
This is the standard type tool in Photoshop, enabling you to quickly create editable text on your canvas. Simply click on the canvas and type, adjusting the font, weight, size and colour in the Tool Options bar. You have more control in the Character and Paragraph panels. You can, as with all the type tools, create warped type by hitting the button in the Tool Options bar and selecting an effect. If you want to create type along a path, hover over the path and click on it with the Type tool (the icon changes to have a little path underneath it when you're over a path).

VERTICAL TYPE TOOL
Keyboard shortcut: T
Use the Vertical Type tool to create vertical type in exactly the same way as the Horizontal Type tool.

HORIZONTAL TYPE MASK TOOL
Keyboard shortcut: T
This tool creates a mask, or selection, based on the font you've chosen. When you click and start typing, the canvas will go pink, showing your mask in white. When you've finished, the canvas goes back to white with your type mask surrounded by marching ants. From here you can either paint the type in manually, fill it or paste an image into it using the Edit>Paste Into command.

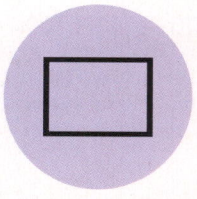
VERTICAL TYPE MASK TOOL
Keyboard shortcut: T
Exactly the same as the Horizontal Type Mask tool, although this creates a vertical type mask.



PATH SELECTION TOOL

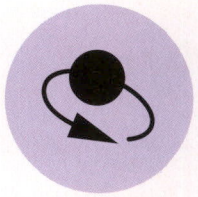
○ **Keyboard shortcut: A**
A relatively simple tool, enabling you to select multiple paths and either move them around, or, using the Tool Options bar, combine two or more paths into one. Use in conjunction with the Paths panel for complete control.

DIRECT SELECTION TOOL
○ **Keyboard shortcut: A**
This tool enables you to directly select points on a path and edit them. There are no options in the Tool Options bar for this simple tool.



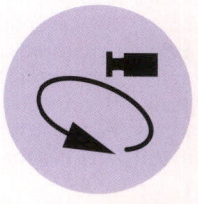
SHAPE TOOLS

○ **Keyboard shortcut: U**
This tool flyout enables you to produce a variety of custom shapes. When you create a shape, it's essentially a vector mask with pixels underneath. When creating a custom shape, make sure the Shape Layers option is selected in the Tool Options bar. You can of course select Paths if you want to just create a path using this tool.



3D OBJECT TOOLS

(Photoshop Extended only)
○ **Keyboard shortcut: K**
Only available in Photoshop Extended, these tools enable you to manipulate your imported or created 3D objects. You can rotate, roll, pan, scale and slide (the latter enabling you to move the object around in 3D space on a Z-axis). You can either select the tools directly from this flyout or, after selecting one, flick between them in the Tool Options bar.



3D CAMERA TOOLS

(Photoshop Extended only)
○ **Keyboard shortcut: N**
This set of tools enables you to manipulate the 3D camera, rather than rotating the actual 3D object, leaving it in a fixed position. Again, you can choose between the tools from the Tool panel or the Tool Options bar.

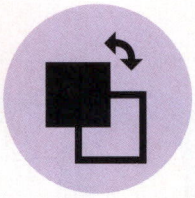
HAND TOOL

○ **Keyboard shortcut: H**
Use this tool to pan around your image. You can hit the Space bar to activate this while using most tools. The different choices in the Tool Options bar enable you to quickly show your document at various sizes.

ROTATE VIEW TOOL
○ **Keyboard shortcut: R**
The Rotate View tool can be very handy when digitally painting, illustrating or retouching (especially when using a Wacom tablet), enabling you to rotate the canvas for a better angle for painting. The document itself is not rotated, just the view.

ZOOM TOOL

○ **Keyboard shortcut: Z**
Simply, the Zoom tool can be used to zoom in and out of your artwork. Either click once on your canvas to zoom in and hold Alt/Opt and click to zoom out, or you can click-and-drag around an element or object to zoom into that. As you click-and-drag, Photoshop automatically starts zooming. You can also change the magnification at the bottom of the canvas and change document view sizes in the Tool Options bar.



SET FOREGROUND COLOUR

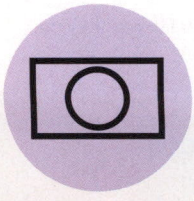
Keyboard shortcut: N/A
By clicking this at the bottom of the Tool Options bar, you can quickly change the foreground colour. The Colour Picker appears, and from there select the colour and even add it to your Swatch Library if you wish.

SET BACKGROUND COLOUR

Keyboard shortcut: N/A
Setting the background colour is exactly the same as setting the foreground colour. Using the small arrow to the top-right of the colours in the Tool panel enables you to quickly swap foreground and background colours. Alternatively, you can use the keyboard shortcut 'X' to do this.

DEFAULT FOREGROUND AND BACKGROUND COLOURS

Keyboard shortcut: N/A
Click this to revert to the default foreground and background colours (black and white). You can also use the keyboard shortcut 'D' to do this.



EDIT IN QUICK MASK MODE

Keyboard shortcut: N/A
Useful for speedily creating masks and selections using any of Photoshop's tools. You can use brushes, filters – almost anything in this mode, which enables you to work on a selection, not the image itself. It's invaluable if you do a lot of retouching or compositing work. You can jump between regular and Quick Mask mode by using the 'Q' shortcut.

KEYBOARD SHORTCUTS

Photoshop CS5.5

FILE

Go to Bridge	Ctrl/Cmd+Shift+W
Revert	F12
File info	Ctrl/Cmd+Alt/Opt+Shift+I

EDIT

Undo/Redo	Ctrl/Cmd+Z/F1
Step Forward	Ctrl/Cmd+Shift+Z
Step Backward	Ctrl/Cmd+Alt/Opt+Z
Fade	Ctrl/Cmd+Shift+F
Paste in Place	Ctrl/Cmd+Shift+V
Paste Into	Ctrl/Cmd+Alt/Opt+Shift+V
Content-Aware Scale	Ctrl/Cmd+Alt/Opt+Shift+C
Fill	Shift+F5
Free Transform	Ctrl/Cmd+T

TOOLS

Move	V
Rectangular/Elliptical Marquee	M
Lasso/Magnetic Lasso	L
Quick Selection/Magic Wand	W
Eyedropper/Colour Sampler	I
Crop/Slice/Slice Select	C
Spot Healing Brush	J
Brush/Mixer Brush	B
Clone/Pattern Stamp	S
History/Art History Brush	Y
Eraser/Magic Eraser	E
Gradient/Paint Bucket	G
Dodge/Burn/Sponge	O
Pen	P
Type	T
Path/Direct Selection	A
Rectangle/Custom Shape	U
3D Object Rotate	K
3D Rotate Camera	N
Hand	H
Rotate View	R
Zoom	Z

WORKSPACE

Default Colours	D
Switch Default Colours	X
Toggle Quick Mask Modes	Q
Toggle Screen Modes	F
Toggle Preserve Transparency	/

BRUSH CONTROLS

Decrease Brush Size	[
Increase Brush Size	]
Decrease Brush Hardness	{
Increase Brush Hardness	}
Previous Brush	,
Next Brush	.
First Brush	<
Last Brush	>

LAYER

New Layer	Ctrl/Cmd+Shift+N
Layer via Copy	Ctrl/Cmd+J
Layer via Cut	Ctrl/Cmd+Shift+J
Create Clipping Mask	Ctrl/Cmd+Alt/Opt+G
Bring to Front	Ctrl/Cmd+Shift+]
Bring Forward	Ctrl/Cmd+]
Send Backward	Ctrl/Cmd+[
Send to Back	Ctrl/Cmd+Shift+[
Merge Layers	Ctrl/Cmd+E
Merge Visible	Ctrl/Cmd+Shift+E

SELECT

Select All	Ctrl/Cmd+A
Deselect	Ctrl/Cmd+D
Reselect	Ctrl/Cmd+Shift+D
Inverse	Ctrl/Cmd+Shift+I/F7
All Layers	Ctrl/Cmd+Alt/Opt+A
Refine Edge	Ctrl/Cmd+Alt/Opt+R

FILTER

Lens Correction	Ctrl/Cmd+Shift+R
Liquify	Ctrl/Cmd+Shift+X
Vanishing Point	Ctrl/Cmd+Alt/Opt+V

VIEW

Zoom In	Cmd++/Cmd+=
Zoom Out	Cmd+-
Fit on Screen	Cmd+0
Actual Pixels	Cmd+1/Cmd+ Opt+0

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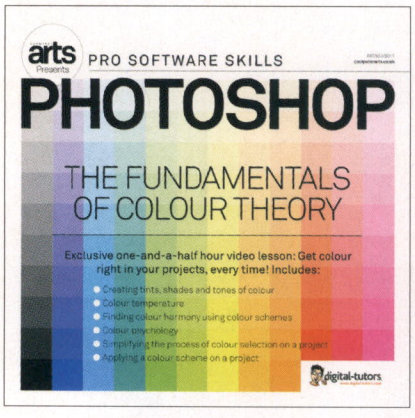
PRO SOFTWARE SKILLS PHOTOSHOP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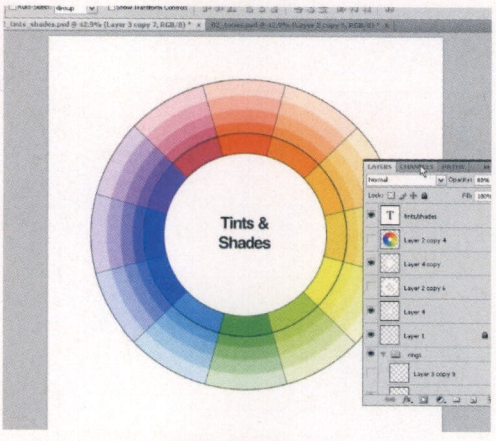
PHOTOSHOP
THE FUNDAMENTALS OF COLOUR THEORY
Exclusive one-and-a-half hour video lesson: Get colour right in your projects, every time! Includes:
Creating tints, shades and tones of colour
Colour temperature
Finding colour harmony using colour schemes
Colour psychology
Simplifying the process of colour selection on a project
Applying a colour scheme on a project
digital-tutors

Understanding colour theory is integral to a designer's daily work. So, if you ever find yourself struggling to find the perfect colour scheme, stick the disc you'll find on the front of this magazine in your drive and discover how to get to grips with colour with a complete one-and-a-half hour video from Digital-Tutors. There's also loads of resources to help you in your work, including fonts, textures and Photoshop actions; not to mention galleries from some of the best Photoshop users in their field. See the full listing on these pages for more.

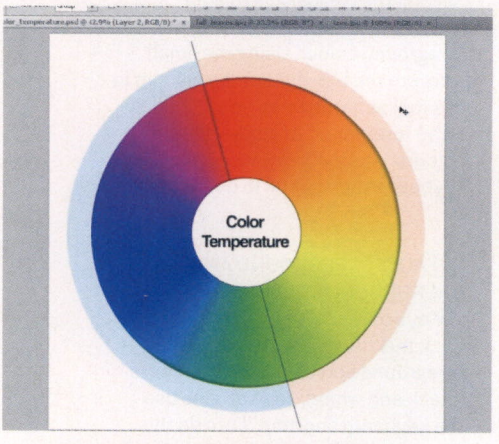
THE FUNDAMENTALS OF COLOUR THEORY – EXCLUSIVE VIDEO TUITION

Get colour right every time with this complete 1.5 hour lesson from Digital-Tutors



Master tints and shades

Create tints, shades and tones of the 12 basic segments on a colour wheel.

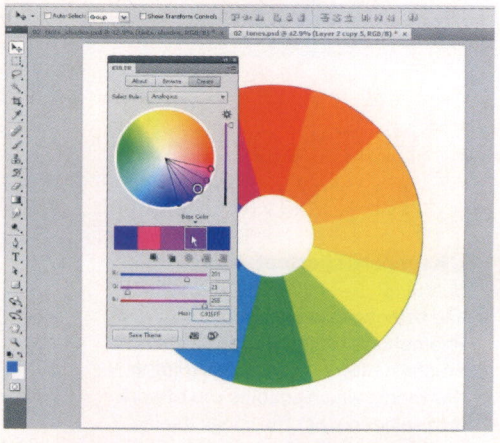


Use colour to change the feel

Discover how temperature can be applied to colours to emphasise different moods.

Discover harmonies

Examine colour schemes in order to find colours that harmonise (and clash).



Use Kuler

Use Adobe's excellent Kuler extension to explore more colour hamonies.

01

01-02 Check out the beautiful retouching work of designer **Ben Secret** in the Gallery section

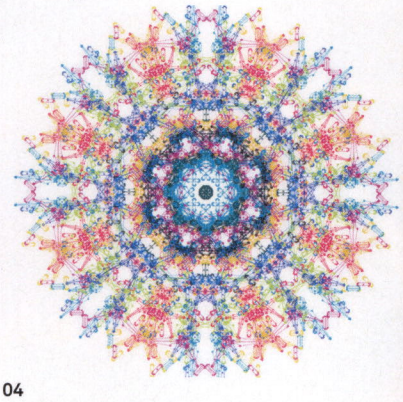
03-04 After following her tutorial (page 78) on how Photoshop can help you transform throwaway items into artworks, vists **Andrea Stark**'s disc gallery

05 A selection of awesome work from the portfolio of designer **Justin Maller**

06 Per Gustafsson selects some of his finest modern-day abstractions for the Gallery section

02

03



04

05

06

Ben Secret gallery photographers: Alina Herbert-Khagay, Chanel Rene, Ruth Rose

GALLERIES

Andrea Stark
Recent graduate Stark shows off a selection of sparkling illustrations

Justin Maller
Portfolio highlights from the Australia-born, New York-based designer

Per Gustafsson
The man behind the moniker Modern Style opens his portfolio

Ben Secret
Highlights from the portfolio of the designer, photographer and retoucher extraordinaire

Mike Kus
The designer who creates websites as beautiful as they are functional

RESOURCES

Photoshop training files
All the files you need to complete The Fundamentals of Colour Theory tuition

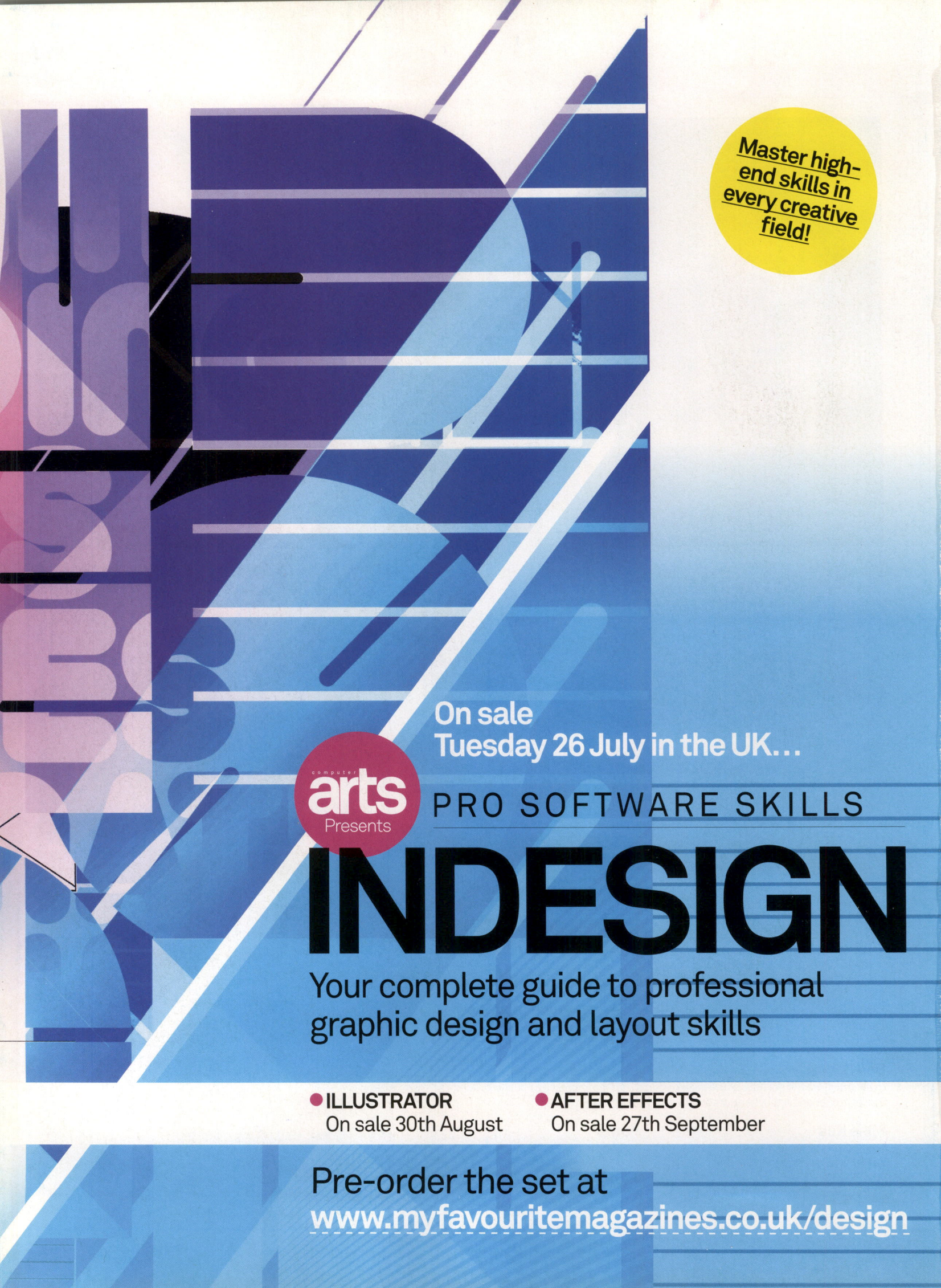
The pro's guide to channels
The files you need for the channels walkthroughs on page 14

The pro's guide to paths
The files you need for the paths walkthroughs on page 26

Photoshop actions
Over 100 Photoshop actions, divided into 15 sets

Fonts
100 free fonts to use in your design projects

Textures
100 textures courtesy of Image*After



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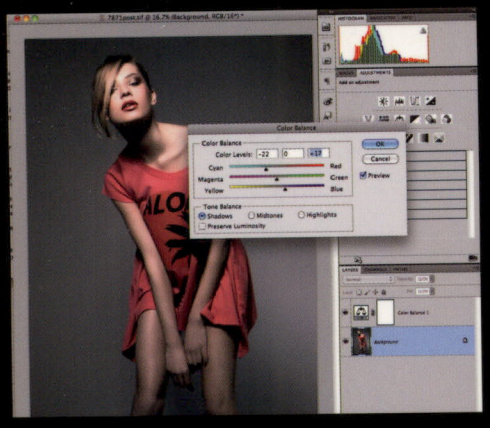

- Build brilliant, fresh effects into your work with **channels**
- Harness the wide-ranging power of **curves**
- Make **paths** work harder in your Photoshop workflow

- New ways to use **layers** to make your creative process slicker

Ultimate inspiration

- depthCORE founder **Justin Maller** reveals the benefits of slimming down your toolset
- **Beefactory**'s retouching secrets
- Photomontage specialist **Emeric Trahand** on why you need to experiment

- Meet **Mike Kus**, the designer making the web as beautiful as it is functional

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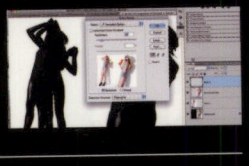
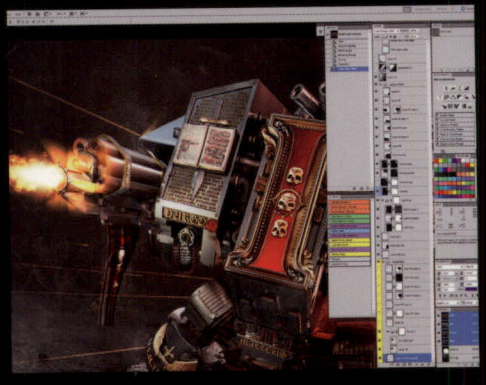
Pro techniques

- **Customise Photoshop** to your exact workflow needs
- 50 ways to **traceless retouching**



- Lead the next generation of **online designers**
- **Transform your illustration** workflow with Photoshop



- Achieve **smooth retouching** without losing realism
- The quick, easy way to **mock up websites** with Photoshop

- Blend **handmade and digital** techniques for unique artworks